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Тураев К.Т., доктор философии по географическим наукам,
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Эргашев М.М., кандидат технических наук,
Эргашева З.А., кандидат медицинских наук, доцент,
Эрданов М.Н., кандидат географических наук,
Эрназаров А.Н., доктор философии по педагогическим наукам,
Эсанова Ш.М., кандидат технических наук, доцент,
Эшниёзов У.А., доктор философии по педагогическим наукам (PhD),
Эшчанова Г.Н., кандидат педагогических наук, доцент,
Юнусов Ф.М., кандидат педагогических наук, доцент,
Юсупов А.Р., кандидат технических наук,
Ядгаров А.А., доктор экономических наук, доцент,

Отв. ред. А.А. Зарайский

Главный редактор:

Тягунова Людмила Анатольевна, кандидат философских наук

ОСНОВНОЙ РАЗДЕЛ

*Abdiganiyeva G.
teacher
department of Philology
ISFT Institute*

HARNESSING THE POWER OF MILITARY VOCABULARIES IN WRITING: STRATEGIES FOR TEACHING

Abstract. In the realm of language and communication, the integration of military terminology into writing serves as a potent tool, imbuing narratives with vivid imagery, precision, and authority. Whether crafting fiction, persuasive essays, or technical documents, the strategic incorporation of military lexicon can elevate prose to new heights, effectively engaging readers and commanding attention. Let's delve into the art of utilizing military words in writing, exploring techniques that empower writers to wield this specialized vocabulary with finesse and impact.

Keywords: tactical disarray, discipline, courage, urgency, tension, anticipation, dynamism, authoritative sources, veterans, strategy, progression, and climax, multimedia integration, real-world relevance.

Harnessing military terminology in writing offers a plethora of opportunities to enhance expression, evoke imagery, and engage readers on multiple levels. By employing precision, authenticity, and strategic integration, writers can leverage this specialized lexicon to craft compelling narratives that resonate with power and resonance. Whether employed sparingly for emphasis or woven seamlessly into dialogue and description, military words serve as formidable allies in the writer's arsenal, enriching storytelling with depth, intensity, and authenticity.

Precision and Clarity: Military terminology often embodies precise and concise language, essential for conveying complex concepts efficiently. Embrace this clarity in your writing by selecting terms that succinctly express ideas. Replace vague descriptors with specific military jargon to enhance the reader's understanding and create a more immersive experience. For instance, instead of describing a chaotic situation as “confused,” opt for “tactical disarray” to evoke a clearer image.

Evoke Atmosphere and Tone: Military vocabulary carries connotations of discipline, courage, and urgency, making it instrumental in setting the tone and atmosphere of a piece. Tailor your choice of words to evoke desired emotions and establish the desired ambiance. Deploy terms like “barrage,” “siege,” or “maneuver” to infuse scenes with tension, anticipation, or dynamism, effectively immersing readers in the narrative's mood.

Character Development and Dialogue: Integrate military terminology into character dialogue to deepen characterization and authenticity, particularly for characters with military backgrounds or occupations. Use terminology reflective of rank, branch, or specialization to enrich dialogue, providing insights into characters' personalities, experiences, and motivations. Dialogue peppered with military slang and acronyms can foster realism and credibility, enhancing reader engagement and immersion.

Symbolism and Metaphor: Beyond literal usage, military terminology lends itself to powerful symbolism and metaphorical interpretation. Harness the symbolism inherent in military ranks, insignia, or operational maneuvers to imbue your writing with layers of meaning and allegory. Analogize strategic principles to interpersonal dynamics or societal structures, drawing parallels that resonate with readers on multiple levels and deepen thematic exploration.

Narrative Structure and Pacing: Adopting military terminology can invigorate narrative structure and pacing, infusing storytelling with elements of strategy, progression, and climax. Frame narrative arcs as missions or campaigns, employing terminology such as “deployment,” “assault,” and “retreat” to delineate plot phases and enhance narrative momentum. Strategically deploy terminology associated with tactical planning and execution to structure scenes, heighten suspense, and drive the story forward with precision.

Research and Authenticity: Authenticity is paramount when incorporating military terminology into writing. Conduct thorough research to ensure accurate usage of terminology, including proper context, definitions, and nuances. Consult authoritative sources, veterans, or subject matter experts to validate terminology usage and gain insights into military culture and protocols. Accuracy enhances credibility, fostering trust and respect among readers familiar with military conventions.

Balanced Integration: While military terminology can enrich writing, avoid overreliance or gratuitous use that may alienate or confuse readers. Strike a balance between familiarity and novelty, integrating military lexicon seamlessly into the narrative without overshadowing other elements or compromising readability. Employ strategic restraint, reserving specialized terminology for contexts where its impact is most potent and relevant.

Teaching military vocabularies in writing presents a unique opportunity to engage students with real-world contexts while honing their language skills. By employing effective teaching techniques and integrating relevant references, educators can foster a comprehensive grasp of military terminology among their students. This article explores several techniques for teaching military vocabularies in writing, supported by references to academic literature and educational resources. Teaching military vocabularies in writing is not merely about imparting words; it's about instilling an understanding of historical contexts, strategic thinking, and effective communication. Such instruction requires a multifaceted approach that engages students intellectually while fostering their

linguistic skills. In this article, we delve into various approaches to teaching military vocabularies in writing, offering educators practical strategies to enhance student learning and comprehension.

Historical Contextualization: Understanding military terminology necessitates an appreciation of historical contexts. Incorporating historical narratives, primary sources, and archival materials immerses students in the circumstances surrounding military terminology usage (Black, 2005). By exploring pivotal events such as World War II or the Cold War, students gain insights into the evolution and significance of military vocabulary, enriching their understanding beyond mere definitions.

Interactive Learning: Interactive learning activities provide students with hands-on experiences that deepen their engagement with military vocabularies. Simulations, role-playing exercises, and group discussions allow students to apply terminology in realistic scenarios (West, 2018). Whether strategizing military campaigns or analyzing historical documents, interactive activities encourage active participation and critical thinking while reinforcing vocabulary retention.

Multimedia Integration: Multimedia resources offer dynamic platforms for teaching military vocabularies. Documentaries, virtual tours, and multimedia presentations provide visual and auditory reinforcement of military concepts (Reid, 2012). Additionally, incorporating interactive online platforms or educational games allows students to explore military terminology in an engaging and immersive manner, catering to diverse learning preferences and styles.

Cross-disciplinary Connections: Integrating military terminology across various disciplines facilitates interdisciplinary learning and enhances students' understanding of its broader implications. Whether exploring geopolitical conflicts in social studies, examining technological innovations in science, or analyzing propaganda techniques in language arts, cross-disciplinary connections deepen students' appreciation for the multifaceted nature of military vocabulary (Lampert, 2011).

Real-world Relevance: Emphasizing the practical applications of military terminology fosters students' awareness of its significance in real-world contexts. Guest speakers from military backgrounds, field trips to historical sites, or collaborative projects with local veterans' organizations provide firsthand insights into the use and impact of military vocabulary (Mackay & Barney, 2016). Moreover, exploring career pathways that require proficiency in military terminology, such as journalism or defense analysis, inspires students to recognize the relevance of their learning beyond the classroom.

Reflective Practice: Encouraging students to reflect on their learning journey promotes metacognitive awareness and facilitates deeper comprehension of military vocabularies. Journaling, peer feedback sessions, or self-assessment exercises allow students to articulate their understanding, identify areas for improvement, and set personal learning goals (Schön, 1983). By fostering

reflective practice, educators empower students to take ownership of their learning and continuously strive for mastery of military terminology.

Conclusion. Teaching military vocabularies in writing requires a comprehensive approach that integrates historical contextualization, interactive learning, multimedia integration, cross-disciplinary connections, real-world relevance, and reflective practice. By adopting these approaches, educators can create enriching learning experiences that not only enhance students' linguistic proficiency but also deepen their understanding of military history, strategy, and communication. Ultimately, by equipping students with the tools to engage critically with military terminology, educators prepare them to navigate and contribute meaningfully to complex socio-historical discourses.

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Abduazimova D.
teacher
“National Singing” department
State Institute of Art and Culture of Uzbekistan

DEVELOPMENT OF PERFORMANCE STYLES IN TRADITIONAL SINGING

Abstract. The traditional singing direction, which was formed on the basis of historical experiences and embodies the most perfect traditions, is of particular importance with its performance style, form, way of performance, complexity of speech and folkliness. This article talks about popularizing the art of traditional singing performance among the population, especially their wide scope in terms of singing genres, the breadth of performance styles, and the manifestation of local traditions of place and space.

Key words: traditional singing, musical heritage, song, classical singing, singing, performance art, performance styles, folk sayings, way of saying, melody.

In the performance of the history of Uzbek music art, the art of singing passed from the teacher to the student based on tradition, was formed, developed, adapted to different conditions and has reached us. Folklore sayings in folk art, professional music in the oral tradition - statuses, academic vocals and modern music as an art form that has fully manifested its national characteristics, traditional singing is in the main place. Musicologist S. Bekmatov mentioned in his research that each of the above-mentioned trends has its own style, rules, and characteristics from the point of view of form and performance. Among them, the direction of traditional singing, which was formed on the basis of historical experiences and embodies the most perfect tradition, is of special importance with its performance style, form, way of performance, complexity of saying and folkliness. Since time immemorial, this direction has been bringing out the most beautiful customs, traditions, values and national spirit of the Uzbek people, showing the originality and originality of the rich spirituality of our people in front of the peoples of the world. that is why the tradition of singing and its directions and styles are being formed and developing. The art of performing traditional singing has become widely popular among the population. It is especially significant in terms of the wide scope of the singing genre, the breadth of performance styles, and the manifestation of local traditions of the place and space. Indeed, as a result, performance styles characterized by local elements, and later schools of performance, emerged. Andijan, Khorezm, Margylan, Kokand khofiz schools or Ota Jalal Nazirov, Khamrokul Qori, Usta shodi Azizov, Khojikhon Boltaev, Madrakhim Sherozi (Yakubov), Mamadbuva Sattrov, Rasulqori Mamadaliyev, Murodjon Akhmedov, Khoji Abdulaziz Abdurasulov, Mamatbuva Sattorov, Jurakhan Sultanov, Ma'murjon Uzokov, Komiljon

Otaniyozov, Fattahkhan Mamadaliyev, Komuna Ismailova, Nazira Akhmedova, Saodat Qabulova, Berta Dovudova, Fakhriddin Umarov, Otajon Khudoyshukurov, Tavakkal Kadirov, Khairulla Lutfiillayev, Kamodiddin Rakhimov, Sherali Joraev, Artik Otajonov, Makhmudjon Tojiboev, Munojaat Yolchieva and hundreds of other singers have appeared.

Knowledge and practical elements occupy a special place in traditional singing, as in other areas of the art of singing. One such element and the primary process is undoubtedly sound. Everyone has their own tone of voice. We distinguish and separate from each other based on the color of the voice of the *ulama*. The color of the singer's voice depends on the performance skills of the singer, the pronunciation of words, the way of saying, the melody and melody, and the experience of creative skills.

These specific stages, which exist at the core of the singing practice, have literally created their own level, which among the people are *singer*, *laparchi*, *yallachi*, *dostan*, *termachi*, *ashulachi*, *interpreter*, *savthkhan*, *nasrkhan*, was brought to be called by names such as *zikir*, *jahrchi*, *goyandachi*, *etymchi*, *singer* and finally *hafiz*. And these are formed in practice as types of singing art. It has become a tradition to consider each of my performances to be perfect in every way and to reach the highest level as "*hafiz*". For example, *hafiz* is a term given to a singer who has achieved a comprehensive and high level of performance skills and is an expert in his field. The melodies and, most importantly, the spirit of Uzbek music are reflected especially in *hafiz*. Is it possible to reach a high level in singing and acquire classicism, that is, to call the masters of classical music, along with the names "*singer*" and "*maqomchi*", "*hafiz*" from the 30s of the XIX century has already become an image in our language.

In each of the above-mentioned terms, the features of the musical genre are fully expressed, while "*hafiz*" also shows some of its aspects in connection with a number of structural features. "*Hafiz*" is derived from the Arabic word "*khifz*", which actually means "*keeper*", "*rememberer*". That is probably why, in the past, those who had professions related to performance interpretation and those who embodied the aspect of interpretation were considered important in their actions, i.e., *kifz*.

By the 30s of the 20th century, it was officially popular to call the performers of large-scale songs belonging to the heritage of classical music and folk songs - skilled singers and famous singers. In 1939, the government established an honorary title called "*Khalq hafizi*". Famous singers Jorakhan Sultanov, Mamurjon Uzokov and Artikkhoja Imamkhojayev were among the first to receive it.

It is known that in the process of historical formation, the peoples on earth have embodied the most beautiful qualities of humanity and have passed down a number of traditions from generation to generation as a legacy. Especially those who paid great attention to the preservation of important events, factors and events in social life, as well as traditions, values, customs and ceremonies related to daily

life. Under the influence of social, economic and political events, the formation and development of features related to the language, spirituality, and essence of the people, and the emergence of new trends and directions based on them, was considered one of the main laws of culture. Since time immemorial, ceremonies, events and actions related to certain conditions, realities, and spiritual needs have been formed in various forms in various spheres of life. In the course of generations following one or another event over the centuries, the need for them has gradually become a pattern, to carry out and regularly continue the ritual when the circumstances require it.

A number of unique performance styles of singing have been created in the musical creativity of the Uzbek people. one of these styles is the sudden singing of a song created in an instant without special preparation, based on one's own performance capabilities, and it is considered *badikhagoy* among the population. In the science of musicology, *badikhagoy* is a poem (music or song) created instantly without special preparation, or a musical piece suddenly sung in connection with an event or event. In music, there are examples of genres such as sayings, *terma*, *lapar*, based on special *badikhaguy*, which are characteristic of the art of great singing and *bakhshi*. In the performance of traditional singers, the song samples are formed in a unique *Badikhagoy* style. The singer performed the song in his own way using all his capabilities.

In traditional singing, the voice plays the main role in bringing the music to the listeners at a high level. In Uzbek musicology, when talking about sound, sound is interpreted as an appearance. It can be achieved by various means and actions. A sound with a certain pitch *m* is considered a musical sound. It is the human voice that is capable of perfectly singing through musical sounds and emotions. The singer's voice has *timbre*, which is formed by the harmony of sound power, height, hardness and all of them. In the art of traditional Uzbek singing, there is a unique freshness, pain, beauty, beauty of the voice, which does not have its own appearance, but is always felt and understood. these consonants constitute a sound with a complete meaning. In the same traditional singing practice, these aspects have been positively evaluated as passionate features of performance. Like other types of singing, the main task of the main singer is to be able to influence the listener's heart by making extensive use of all internal and external features of the human voice. Every singer who has *awalam* has the ability to breathe, his juicy voice, can fully and fluently express the text of the work, and pays full attention to the length of vowels and consonants. it should show its effect when they get food.

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*Abduganiev O.I., doctor of geographical sciences
associate professor
Department of Geography
Fergana State University
Kosimov D.B.
lecturer
Department of Botany, Biotechnology and Ecology
Fergana State University
Sobirova Sh.S.
Geography student
Fergana State University*

**CALCULATION AND ASSESSMENT OF ECOLOGICAL-ECONOMIC
BALANCE IN THE GEOINFORMATION SYSTEM (ON THE
EXAMPLE OF FERGHANA REGIONS)**

Abstract. The article discusses the main issues of the ecological-economic balance of the territory. A comprehensive assessment of the ecological-economic balance of the Fergana region was carried out by the ratio of the main land use categories characterized by varying degrees of anthropogenic pressure. The coefficient of natural security of the territory is determined and the typification of the municipal regions and urban districts of the region is carried out according to the degree of tension of the ecological-economic condition of the territory.

Keywords: ecological-economic balance, anthropogenic pressures, environmental assessment, spatial typology, GIS, natural security of the territory, ecological nets.

Assessing the ecological and economic state of the territory helps to develop the most effective land use options and link socio-economic development with the protection and improvement of the environment, thereby contributing to the sustainable development of the region. To successfully apply the concept of ecological-economic balance, it is necessary to first determine the structure of the territory under study, i.e. way of organizing it. The purpose of applying this methodology is to organize rational land use, which is carried out by improving the management of human economic activities [3, 4].

The concept of sustainable development has found wide application in the economic, social and environmental sphere of public activity. An environmental and economic assessment of the territory is aimed at identifying the most favorable land plots for the goals set by the company or production, as well as, if necessary, monitoring the process of restoration of depleted zones. For the successful creation of programs and their implementation within the framework of the concept of sustainable development, new approaches are needed aimed at

organizing an environmentally compatible society. One of such approaches is the concept of ecological-economic balance (EEB) of the territory, which establishes and maintains harmonious relations between nature and human economic activity [1].

The concept of the ecological-economic balance of the territory includes the following conditions: organization, arrangement and arrangement of territories of different administrative levels on a landscape-ecological basis; preservation and maintenance of natural and slightly modified landscapes that perform important environmental and resource-forming functions in full; rational use and maintenance of the natural potential of the territory, a reasonable distribution of natural resource rents; governance, self-government and territorial justice; achieving an acceptable quality of life and products and maintaining a healthy lifestyle; development of innovative processes [2].

In the process of studying the existing experience in assessing EEB, it was noted that, depending on the chosen research unit, its physical and geographical features and economic development, the components used for the assessment are different, and the development of geographic information technologies allows you to create cartographic products, which reflects each stage of the assessment, as well as the synthesis of the results. Against the background of the successful application of the EEB assessment, the completion of which is the creation of recommendations on the sustainable development of territories, the problem of uniformity and themes of the used and obtained cartographic material is relevant. Modern cartographic works, the purpose of which is an analysis of the ecological-economic condition and its assessment, are based on the techniques proposed by B.I. Kochurov and V.A.Lobkovsky. Today there are two concepts that overlap with each other and complement this ecological-economic condition (EEC) and the ecological-economic balance (EEB). Methodological approaches to the analysis of the EEC and balance of the territory were developed by B.I. Kochurov, Yu.G.Ivanov, V.A.Lobkovsky, and were first tested on example of the territories of the Moscow region and the Republic of Altai. B.I. Kochurov devoted his work to the concept of EEB [3, 5, 7].

It is also important to note the role of GIS in assessing the environmental and economic balance, as a promising tool that makes it possible to analyze calculated indicators and identify spatial patterns. GIS makes it possible to conduct queries on the values of the coefficients (K_a , K_r , K_{ns}), visualize them for comparison and analysis of dynamics, as well as build thematic cartograms that allow you to identify areas with both favorable and unfavorable nature management structures that need more in-depth research.

The assessment of the EEC of the Ferghana region was based on the National Report of the State Committee on Land Resources, Geodesy, Cartography and State Cadastre of the Republic of Uzbekistan on the state of land resources and the data on land balance of cities and districts of the Ferghana region. To assess the current geocological situation caused by the use of natural

and natural resources of the Fergana region, the level of environmental and economic stresses of urban and district territories is studied. For this purpose, anthropogenic load (AL) indicator by city and county is analyzed.

The grouping of lands by the degree of anthropogenic load makes it possible to evaluate the anthropogenic transformation of the territory in comparable terms. They are the coefficients of absolute (K_a) and relative (K_r) tension of the EEC of the territory, calculated by the formulas (1)–(2): coefficient of absolute tension of the EEB of the territory (K_a); coefficient of relative strength of the EEB of the territory (K_r); coefficient of natural security of the land fund (K_{ns}); ecological fund of the territory (P_{ef}); the area of the study area (P_t) (table 1).

Table-1

Coefficients evaluate the ecological-economic balance of the territory (B.I. Kochurov, 1999, 2003).

Name of coefficient	Formula	Used data	Change characteristic values
Absolute ecological tension coefficient	$K_a \frac{AL6}{AL1}$	Areas with high and low anthropogenic loads are taken into account	K_a - the higher the coefficient value, the tighter the situation
Relative environmental stress ratio	$K_r \frac{AL4 + AL5 + AL6}{AL1 + AL2 + AL3}$	Areas of various types of anthropogenic load are taken into account.	$K_r \leq 1$ - tension of the EES of the territory of the balance is balanced To - the higher the value of the coefficient, the tense the situation
The coefficient of natural security of the territory	$K_{ns} \frac{P_{ef}}{P_t}$	Is used $P_{ef} = AL1 + 0,8AL2 + 0,6AL3 + 0,4AL4$ and P_t – the area of the studied territory	K_{ns} – the higher the coefficient value, the better the situation $K_{ns} < 0,5$ – critical level of territory security

The concept of the EEB allows the inclusion of criteria for assessing anthropogenic load in a particular order across specific regions, ie administrative units. Calculation of computers for administrative units of Fergana region is carried out in several stages. The first phase of the calculation focused on the anthropogenic load for all land categories and types, and the appropriate score (Table 2). At the initial stage of the study, the coefficient of absolute tension of the EEB of the territory (K_a) for cities and districts of Ferghana region was calculated. The ratio of land categories and types of AL1 and AL6 categories was determined. The absolute environmental load is 10.2 in the Fergana region. The lower the coefficient values, the more favorable the geocological state and EEB

of the area under study. In terms of administrative and territorial units, the most favorable EEB by K_a is observed in the Dangara (1.5), Yazyavan (2.2), Besharik (3.4), Furkat (6.2), and Soh (16.6) districts. lower than that of the province. These areas are characterized by large areas of protected areas, underwater (rivers, streams and lakes), protected forests and reserve lands. Indicator of K_a is most critical in Rishtan (154.3), Oltiariq (199.3), Uchkuprik (388.6) and Baghdad (493.6) districts (Table 3).

Table -2

The structure of the land fund of the Ferghana region, taking into account the anthropogenic load index (AL).

№	Administrati ve districts	Overall area, thousand, km ²	The degree of anthropogenic transformation, point of AL*					
			1	2	3	4	5	6
1	Besharik	0.78	1572	36010	4332	7292	24019	5309
2	Baghdad	0.42	10	7752	4624	3828	20946	4936
3	Buvayda	0.32	144	5141	1486	2403	19065	4323
4	Dangara	0.45	3157	12001	1438	3863	20584	4759
5	Yozyavon	0.35	1524	7965	1127	2957	18983	3381
6	Quva	0.43	41	8641	6729	3977	19336	4954
7	Oltiariq	0.40	26	9379	2542	2795	20166	5182
8	Qoshtepa	0.39	136	4013	2141	5372	23467	4818
9	Rishtan	0.42	37	7963	4456	4218	19796	5708
10	Soh	0.22	81	15718	1878	607	2445	1345
11	Toshloq	0.28	132	3720	2180	1985	16319	3704
12	Uzbekistan	0.77	62	43648	7601	3371	16906	5423
13	Uchkuprik	0.37	11	9129	2241	2766	18804	4275
14	Ferghana	0.61	162	22378	9470	3092	19678	6490
15	Furqat	0.30	539	5860	459	3478	16772	3324
	Total:	7.0	7752	209868	61106	54153	288614	78965

*1–AL1, ha (Very low); 2–AL2, ha (Low); 3–AL3, ha(Average); 4–AL4, ha (Very High); 5–AL5, ha (Higher); 6– AL6, ha (Highest).

In the Fergana region, the number and categories of protected areas (PA), which constitute the main elements of the ecological nets, are insufficient for both elevation zones and administrative and territorial units. To optimize the overall environmental stresses in these areas, it can be achieved by expanding the protected areas categories of the I-IV or creating new ones.

Table-3

Indicators of the main coefficients of the ecological-economic state of the territory of the Ferghana region (2019)

№	Administrative districts	K_r	K_{ns}	At the expense of P_{ef} %
	In the Fergana region			
	Besharik	0,9	0,5	45,7
	Baghdad	2,4	0,2	25,0
	Buvayda	3,8	0,2	18,8
	Dangara	1,7	0,3	33,1
	Yozyavon	2,4	0,3	27,1
	Quva	1,8	0,3	28,8
	Oltiariq	2,3	0,2	25,4
	Qoshtepa	5,3	0,2	17,0
	Rishtan	2,4	0,2	25,5
	Soh	0,2	0,6	63,5
	Toshloq	3,6	0,2	18,5
	Uzbekistan	0,5	0,5	53,0
	Uchkuprik	2,2	0,3	26,2
	Ferghana	0,9	0,4	40,8
	Furqat	3,4	0,2	22,6
	Total:	1,5	0,3	33,4

Relative coefficient of relative strength of the EEB of the territory (K_r) for each administrative district of Fergana region were calculated. In the analysis of the results, the districts with a value of one K_r are selected. This is an indication of the optimal environmental and economic balance in the districts. If the value of K_r exceeds one, it indicates an increase in the ecological stress in the area. In areas with such an index, sustainable environmental balance can be achieved by expanding protected areas or the areas of ecological reserve lands.

Due to the presence of K_r 1 in Soh (0.2), Uzbekistan (0.5), Besharik (0.9) and Fergana (0.9) districts of Fergana region, the relative environmental stresses are the best. In all other districts, K_r is greater than 1, indicating an increase in voltage. The highest value of K_r was found in Furkat (3.4), Tashlak (3.6), Buvaida (3.8) and Kushtepa (5.3) districts.

The value of the K_r coefficient exceeds 1 in the regions where urbanization and high agro-landscape are high. For example, over the last 10 years, the process of fragmentation in landscapes has increased due to the expansion of settlements in almost all districts, especially in the areas adjacent to regional and district centers. Therefore, in practice, it is not possible to form a district or territory with an ideal EEB. Most of the region's major industrial and transport infrastructure is concentrated in cities and district centers. We can see that the changes in EEB in the Fergana region are negative. For example, this indicator is related to changes in the composition of the natural landscape, which is the highest in the districts of Baghdad, Uchkuprik, Tashlak, Furkat, and Buvaida.

Also, due to the construction of new housing and industrial facilities, the anthropogenic load in the cities is significantly higher than in the administrative districts. Taking into account the recreational needs of the urban population and their role in optimizing the ecological situation, special attention should be paid to the establishment of recreational zones, micro reserves and shelter forests in the areas adjacent to the cities. Biodiversity forests between recreational areas and other land users may serve as buffer zone.

Each anthropogenic impact or their combination corresponds to its own limit of stability of natural and natural-anthropogenic landscapes. The more diverse the landscape, the more resilient it is. At the same time, the level of K_{ns} of a territory also depends on the distribution of lands according to the degree of anthropogenic load. Lands characterized by a high degree of anthropogenic load, as a rule, have low natural protection.

In the Fergana region, the areas with the natural protective coefficient (K_{ns}) above the standard range ($K_{ns} \leq 0.5$) may include Soh, Uzbekistan and Besharyk districts. Regions with relatively high K_{ns} (0.4) are Ferghana regions. In all other districts, the degree of natural protection of landscapes was found to be the most critical, ie K_{ns} 0.1 to 0.3. In some districts, the value of K_{ns} is higher than the regional average, which is explained by the size of the reserve lands, forest resources and protected areas.

As studies have shown, the ecological-economic condition of the territory of the region is unsatisfactory. In connection with the development of agricultural production, industrialization, urbanization, it continues to deteriorate. Agricultural lands are exposed to erosion, deflation, salinization. The transition to an adaptive landscape farming system should be carried out taking into account the ecological-economic condition of the territory. Planned activities should not lead to an increase in the values of the coefficient of its relative intensity of the EES above 1.0. To recommend to the design organizations when assessing the EES of the territory to use our proposed methodology, taking into account the level of land reclamation arrangement of the territory. To carry out the general anti-erosion organization of small land holdings simultaneously on the entire catchment, regardless of the boundaries of the allotment owners.

In some districts of Fergana region, by 2019 we can see a sharp decline in the value of K_{ns} . This is due to the different development of ecological reserve lands in the districts. It can be seen that the landscape and biodiversity indicators and their sustainability are not optimal within administrative and territorial units. Therefore, it is suggested to expand the PA area and to improve the ecological nets for the conservation of natural landscapes and biodiversity conservation, and the preservation of optimal environmental conditions. These activities will enhance the region's natural defenses and provide an opportunity for optimization of the EEB.

Conclusions

One of the main tools for reducing the anthropogenic load on the natural environment is rational land use and environmental management with the regulation of areas allocated for arable land, hayfields and pasture lands for grazing in areas where livestock farming has recently become increasingly developed. To prevent the adverse consequences of the tense ecological and economic balance of the territory, state and municipal control over the state and dynamics of land use should be strengthened.

When analyzing the data obtained, it is clear that natural landscapes, which provide natural protection of the territory, do not occupy a sufficiently large area. The territory of all administrative-territorial units (with the exception of the regions of Sokh, Besharik and Uzbekistan) is dominated by anthropogenic landscapes. Prirodnye landscapes predstavlyayut soboy obshirnye territorii v pystynyakh Tsentralnoy Fergany, na kholmakh yuzhnoy Fergany, v Shakhimardanskom rayone i v Gornom rayone Sokhskogo rayon.

The values of the coefficient (K_a) make it possible to objectively assess the degree of compliance of the intensity of anthropogenic impacts with the restoration potential of natural landscapes and justify the need to create protected natural areas (PNA) in the region with the required size of their area. The lower the coefficient value, the more favorable the geo-ecological situation in the study area.

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Abduhalilova M.
student
ASMI
Noibjonova X.M.
assistant
ASMI

THE EFFECT OF LIPSTICK ON HUMAN HEALTH

Annotation. Lipstick is the favorite makeup product of women. Almost every woman owns this type of cosmetic. However, lipstick has very dangerous side effects that not everyone knows.

Ancient Sumerian and Indus Valley men and women were possibly the first to invent and wear lipstick, about 5000 years ago. The Sumerians crushed gemstones and used them to decorate their faces, mainly on the lips and around the eyes. Egyptians like Cleopatra crushed bugs to create the color red on their lips. Women in the ancient Indus Valley civilization used rectangular pieces of ochre with beveled ends as lipstick.

Lip coloring started to gain some popularity in 16th-century England. During the time of Queen Elizabeth I, bright red lips and a stark white face became fashionable. At that time, lipstick was made from a blend of beeswax and red stains from plants. Only upper-class women and male actors wore makeup. Throughout most of the 19th century, the obvious use of cosmetics was not considered acceptable in Britain for respectable women, and it was associated with marginalized groups such as actors and prostitutes. It was considered brazen and uncouth to wear makeup. In the 1850s, reports were being published warning women of the dangers of using lead and vermilion in cosmetics applied to the face. The first lipstick was created by the Parisian maison Guerlain in 1870. By the end of the 19th century, Guerlain began to manufacture lipstick on a larger scale. The first commercial lipstick was invented in 1884 by them in Paris, France. It was covered in silk paper and made from deer tallow, castor oil, and beeswax. Prior to this, lipstick had been created at home. In the 19th century, lipstick was colored with carmine dye. Carmine dye was extracted from cochineal scale insects native to Mexico and Central America that live on cactus plants. Cochineal insects produce carminic acid to deter predation by other insects. Carminic acid, which forms 17% to 24% of the weight of the dried insects, can be extracted from the insect's body and eggs. Mixed with aluminum or calcium salts, it makes carmine dye (also known as cochineal).

Lipstick contains wax, oils, antioxidants, and emollients. Wax provides the structure for the solid lipstick. Lipsticks may be made from several waxes such as beeswax, ozokerite, and candelilla wax. Because of its high melting point, carnauba wax is a key ingredient in terms of strengthening lipstick. Various oils

and fats are used in lipsticks, such as olive oil, mineral oil, cocoa butter, lanolin, and petrolatum. Lipsticks get their colors from a variety of pigments and lake dyes, including, but not limited to bromo acid, D&C Red No. 21, Calcium Lake such as D&C Red 7 and D&C Red 34, and D&C Orange No. 17. Pink lipsticks are made by mixing white titanium dioxide and red shades. Both organic and inorganic pigments are employed.

Table 1. Essential saponifiable lipids of lipstick

№	Substance	General information	Advantages	Disadvantages
1	Beeswax	Beeswax is a natural wax produced by honey bees. The wax is formed into scales by eight wax-producing glands in the abdominal segments of worker bees, which discard it in or at the hive. Beeswax consists mainly of esters of fatty acids and various long-chain alcohols.	Used cosmetically, beeswax hydrates, conditions, soothes, and calms the skin. It exfoliates, repairs damage, promotes the skin's regeneration, diminishes the appearance of the signs of aging, soothes itchiness and irritation, and creates a hydrating, long-lasting protective barrier against environmental pollutants.	While rare, some people may have an allergic reaction to beeswax.
2	Candelilla wax	Candelilla wax is a wax derived from the leaves of the small candelilla shrub. It consists of mainly hydrocarbons, esters of higher molecular weight(20-29%), free acids, and resins(12-14%, mainly triterpenoid esters).	It is a popular choice for vegan and cruelty-free cosmetics due to its plant-based origin. Candelilla wax is often used as a rheology modifier in cosmetic formulas. It controls the texture, consistency, and spreadability of products, ensuring a smooth and easy application.	Allergic contact dermatitis can be caused by candelilla wax, a natural vegetable wax found in various cosmetic products.
3	Carnauba wax	Carnauba is a wax of the leaves of the carnauba palm Copernicia prunifera. It is obtained by collecting and drying the leaves, beating them to loosen the wax,	All of the natural waxes, carnauba wax is the toughest and has a high melting point. Both of these are critical to creating an effective and durable coating that needs to resist scratches and withstand	Carnauba wax must never be used near the inner nose and ears or on any other particularly sensitive areas of skin. Potential side effects of Carnauba wax include dry skin, acne, rashes, inflammation, dermatitis, dizziness, nausea, blurry

		then refining and bleaching it. As a food additive, its E number is E903.	temperatures up to 160 degrees.	vision, and dryness, irritation, or burning of the eyes.
4	Ozokerite	Historically referred to as earth wax, Ozokerite is a chemically neutralized hydrocarbon wax (petroleum) with admixtures of isoparaffins and aromatics derived from coal and shale. It consists of a mixture of various hydrocarbons containing 85-87% by weight of carbon and 14-13% hydrogen.	Mineral waxes like ozokerite have film-forming and hydrophobic properties in cosmetic products. They contribute shine, protect the skin against moisture loss, and serve as consistency enhancers. Waxes used in cosmetics are highly purified not to cause skin irritation.	According to the combined chronic toxicity and carcinogenicity studies of ozokerite, long-term exposure causes systemic chronic inflammation due to a foreign body response.
5	Olive oil	Olive oil is a liquid fat obtained by pressing whole olives, the fruit of <i>Olea europaea</i>	Olive oil helps in improving cardiovascular system, preventing stroke, reduction of depression risk, reducing breast cancer risk, maintaining healthy cholesterol levels.	Regular consumption of unprocessed olive oil can increase the risks of lethal diseases like atherosclerosis, obesity, heart attack, stroke, breast cancer, and colon cancer.
6	Mineral oil	Mineral oil is any of various colorless, odorless, light mixtures of higher alkanes from a mineral source, particularly a distillate of petroleum, as distinct from usually edible vegetable oils.	Mineral oil has health benefits, such as: softening dry skin, easing constipation, soothing eczema, treating cradle cap, treating dandruff, removing ear wax buildup.	Mineral oil-based enemas can cause skin rash, itching or hives, swelling of the face, lips, or tongue; severe diarrhea; or difficulty breathing or shortness of breath. Other side effects include: oil leakage from rectum, rectal skin irritation, loose stools, lower stomach discomfort or cramps, nausea.

Matte lipsticks contain more filling agents, like silica, but do not have many emollients. Creme lipsticks contain more waxes than oils. Sheer and long-lasting lipsticks contain more oil, while long-lasting lipsticks also contain silicone oil,

which seals the colors to the wearer's lips. Glossy lipstick contains more oil to give a shiny finish to the lips.

Shimmery or frosty lipstick may contain mica, silica, and synthetic pearl particles, such as bismuth oxychloride, to give them a glittery or shimmering shine. The use of lipstick can potentially have some side effects, although they are not common for most people. These may include allergic reactions, dryness, chapping, and irritation of the lips.

Bisphenol-A (BPA) in lipstick can cause infertility and cancer. Nearly 95% of lipstick containers, including those that are claimed to be organic and chemical-free, were found to contain BPA, and this chemical is easily absorbed into lipstick applied to the lips.

BPA is an endocrine disruptor that has been found to cause reproductive problems, birth defects, and cancer.

Heavy metals in lipstick are the cause of kidney failure. Lipstick contains harmful heavy metals such as cadmium, magnesium and chromium. All these metals can cause dangerous diseases and organ damage. Too much cadmium can increase the risk of kidney failure. Regularly applying lipstick can cause serious stomach tumors.

Lead is bad for the nervous system. Lead is a common ingredient in most lipsticks. Lead is a poison that has a harmful effect on the nervous system. It can also cause brain damage, hormonal imbalances, and infertility.

Petrochemicals can affect the brain. Many lipsticks have common petrochemical ingredients, which have harmful side effects. Petrochemicals are by-products of crude oil and natural gas. It can cause endocrine disruption that acts as an obstacle to growth, development, reproduction, and intelligence.

Preservatives used in lipstick cause cancer. The preservatives used in lipsticks are formaldehyde and parabens, which are known carcinogens. Lipsticks that use these preservatives cause eye irritation, coughing, wheezing, and skin irritation. The mineral oils used in lipsticks clog the pores of the skin and are the cause of much long-term damage.

Chemicals in lipstick are harmful to the body. Although bismuth oxychloride is a chemical used to preserve lipstick, it is extremely harmful to the body. The harmful effects of lipstick are due to the carcinogenic properties of this ingredient. Propylparaben acts as a preservative, just like formaldehyde. Daily use of lipstick increases the amount of toxins.

Conclusion. Lipstick is used most of the day. Women inadvertently absorb harmful substances while eating. This increases the impact of toxins found in lipsticks. Lipsticks or lip glosses that cause women to exceed the allowable daily intake for aluminum, cadmium, chromium, and manganese. They build up in the body over time and cause toxicity. The intake of these metals is more than 20% of their accepted daily intake (ADI) limit (ADI is the maximum amount of toxins a person can be exposed to without any health risk).

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THE ROLE OF LITERATURE IN TEACHING AND LEARNING A FOREIGN LANGUAGE

Annotation. This article talks about the important aspects of students' learning foreign languages, as well as increasing their interest in studying foreign literature, and acquiring sufficient practice and skills in this regard. We all know very well that language is a means of communication, but in the process of learning a language, acquiring deep and wide information about foreign literature will lead to a mature and correct formation of our view not only on literature, but also on the world community.

Key words: literature, language learning, role and technique, teaching methods, literary text.

Literature and language are closely related and this is a fact that no one can deny. Literature is made up of language and represents one of the most common uses of language. Language and linguistic analysis can also be used to access literature from a learner's perspective. This method is by no means new as literature is widely used in various language teaching methods. However, here the point of view changes, giving the literary text greater significance as a work of art. Let us first look at the changing role of literature in the second language teaching tradition and conclude with a consideration of its contemporary position within the communicative approach. In the method of grammatical translation, literature was a central component.

One of the priorities of modern education is the development of the student as an individual, ensuring his competence in all areas so that he can take his place in society. According to N.D. Galskova, the main and modern strategic goal of teaching a foreign language is to direct students to equal and independent participation in the process of intercultural communication, in the process of forming bilingual or multilingual and cultural personality traits. Of particular importance is the fact that the implementation of the above principles of teaching foreign languages orients the process of learning foreign languages to the student's personality as a whole.

The main thing is to develop in him (the student) not only the skills and abilities of foreign language speech, but also the entire complex of his cognitive and affective abilities, which are often not linguistic, but create the prerequisites for the successful functioning of foreign language speech. This means that in the modern model of teaching foreign languages, built on the principles of interconnected communicative, sociocultural and cognitive development of the student, the latter plays the role of a subject of the educational process and a

subject of intercultural interaction. The current socio-political situation in our society shows the need to form a new national and cultural worldview. This requires sufficient changes in the form and content of education in our increasingly changing social life, because it is the education system that is capable of purposefully shaping the ethnocultural and social processes of the state. Modern methods of teaching a foreign language suggest paying special attention to the issue of organizing education based on a competency-based approach at all stages of the lifelong education system, especially in higher education. Today, preparing students for national and intercultural relations, relations of international cooperation is set as an important priority task, which requires the development of knowledge, skills and abilities in students in the foreign language being studied.

The value of literature essentially lies in its ability to develop students' sociolinguistic knowledge of the target language by exposing them to a wide range of linguistic varieties. Language changes from one social group and profession to another. Likewise, a person speaks differently in more than one social context, using a formal or informal style of speech. In light of the above, literature introduces students to other languages and cultures. Moreover, the connection between literature and language could be seen through the expression of ideas. It shows how people from different cultures can share their ideas simply through language. In addition, a subsequent benefit of studying literature will be the enrichment of students' vocabulary and reading skills. Additionally, literature can be used in teaching because non-English speaking students translate poetic terms directly without understanding the context, which will not help their language development. In essence, the study of literary material can act as a catalyst to promote the intellectual growth of a student through interaction, exchange of views and opinions among his classmates.

Literature as an academic subject is typically included in the curricula of college arts and humanities departments, while none of the science departments devote much attention to literary texts. As a result, students often have difficulty understanding and mastering components of a foreign language. Moreover, if both subjects (language combined with literature) are taught together, they can enhance the level of understanding of other subjects.

Another problem which teaching literature poses is the employment of impractical strategies of teaching by the teaching staff. Most of the teachers use whatever methods they have under their disposal; whereas literature should be related to real-life experiences as much as possible. Teaching by itself is an art which aims at conveying information in such a way as to make the recipients understand, accept and think logically of the material he is being taught. If nothing of this happens, then there must be some error in the whole educational process.

Because studying literary texts helps test how well students have learned the rules of grammar and sentence structure, as well as new vocabulary in language courses, it should help these students think better about the subject they are

writing about. Thus, learning one language skill, namely writing, is done so systematically and safely that the best results can be expected. Accordingly, the inclusion of literary material in language course programs is not without advantages. Instead of playing a negative role in the learning process, it can play a supporting role, not only exposing students to how native speakers use the target language in various situations, but also accelerating language acquisition, since all language skills are practically practiced in literature.

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*Abdullayev S.A.
teacher
Termiz State Pedagogical Institute*

MECHANISMS OF ADEQUATE ADAPTATION OF STUDENTS TO THE CHANGING EDUCATIONAL ENVIRONMENT

Annotation. In this article, to date, in the process of education and training, in order to increase the social activity of young people, it is necessary to fully democratize and liberate the relationship between the teacher and the student. the vision, the internal form of education, the introduction of a series of new, innovative approaches to its content and technologies, in general, the creation of an institutional system based on the cooperation of the educational system and state bodies.

Key words: Education, students, changing educational environment, adaptation, social, psychological, pedagogical.

To date, in increasing social activity in the educational process of young people, democratizing and liberating the relationship between the teacher and the receiving students is necessary to look at the position of the teacher himself, The internal form of education requires the introduction of a series of new, innovative approaches to its content and technologies, and in general, the creation of an institutional system based on the cooperation of the educational system and state bodies. Such a defined new approach requires a radical change in the consistent relationship between the teacher and the learner today. Integration of the educational resources of the higher educational institution and the socio-cultural environment is the main direction of the accompanying activities, and it allows the comprehensive use of a wide range of social-psychological-pedagogical work methods and forms.

The process of pedagogical support of the student's adaptation in the study group includes several stages: 1st stage - propaedeutic - diagnostic. It refers to the preparation and entry into the process of adaptation of all participants of pedagogical accompaniment: both those who accompany and those who are accompanied. The duration of this stage is 6-8 weeks. At this stage, the step-by-step algorithm of actions is as follows: training of teachers and tutors of first-year study groups, development of a one-year adaptation program by group tutors, tutor familiarization with students' personal work, organization of acquaintance with students in the study group, every to determine the adaptation potential of a group participant, to determine the factors that help students to adapt successfully in this study group. Stage 2 - constructive interaction. It is a field of social experiments where students have the opportunity to try different options of self-realization in the system of relationships within the group under the guidance of teachers and senior students (who participate as tutors). The stage lasts 6 months.

The algorithm of step-by-step actions is as follows: organization of training of constructive communication methods in the group by the tutor, regular work on the formation of the team in the group, creation of interaction situations that require the manifestation of the individual's different personal characteristics in the group and his communicative potential, analyzing the results of interaction within the group, then the algorithm can be repeated: organizing the training of new groups of skills and abilities, in particular, the student demonstrates these skills, analyzes and re-understands his activity and communication in the group create possible realistic situations. 3rd stage - analytical activity. Summarizing the results of the student's adaptation in the group, independent and expert evaluation, connecting these achievements with the results of educational activities, joining activities outside the auditorium, identifying difficulties, developing individual trajectories of the further development of the student and the member of this educational group. output is expected.

The stage lasts 4-6 weeks. Algorithm of step-by-step actions - self-analysis, analysis in microgroups, general group analysis and reflection (re-understanding), organization of individual reflection meetings with the tutor. In order to achieve the goal of pedagogical support for the adaptation of students in the study group, the main forms of traditional information giving (social-psychological, pedagogical support, organization of joint activities), methods (educational situations, actualization, strengthening and enrichment, assistance and design of creativity) and used on a wide scale (individual and group conversations, discussions, team-creative works, situational games, etc.) within the framework of the implementation of the pedagogical accompaniment model, it is suggested to use the interactive adaptive teaching methods listed in Table 3 [85]. In order to effectively implement the adaptation process, active and interactive forms of training are used depending on the complexity of the educational process: elementary level - normative-logical and communicative; innovative projects; application and implementation of methods of modeling life situations.

Game methods, naming complexity, role-playing, business game, project communication technology, social-psychological situation of the student in the study group, formation and development of ideas about the student's overcoming difficulties, his success in his educational activities and the chosen profession expands its potential for The strategic, tactical and operational monitoring of units is as follows: - strategic monitoring includes a set of diagnostic tools that allow studying the conditions for adapting students, determining the goals and tasks of accompaniment. In this study, strategic monitoring was carried out with the help of a priori ranking of factors influencing the process of adaptation in the student's study group. - tactical monitoring with the help of a set of diagnostic tools that allow monitoring the level of adaptation of students, their orientation to group interaction, the need for standardized test methods, as well as quantitative and qualitative monitoring of the dynamics of changes, students' provided through the analysis of the mastery. Rapid monitoring performed the function of step-by-step

monitoring of the effectiveness of passing the stages of pedagogical accompaniment to the adaptation of students in the study group.

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*Abdulxayeva M.U.
Qo‘qon davlat pedagogika instituti
Boshlang‘ich ta‘lim metodikasi kafedrasida o‘qituvchisi*

TIL VA NUTQ HAQIDA OLIMLARNING FIKRLARI

Annotatsiya. Ushbu maqolada til va nutqning farqli tomonlari. Til va nutqning rivojlanish davrlari hamda til va nutq to‘g‘risida Alisher Navoiy, Yusuf xos Hojib, Abu Nasr Farobiy, Ibn Sino, Amir Temur kabi buyuk mutaffakkirlarning til va nutq haqidagi fikrlari haqida ma‘lumotlar berilgan.

Kalit so‘zlar: ma‘naviy kamolot, til, nutq, tafakkur, barqarorlik, o‘zgaruvchanlik, nutq ma‘daniyati.

*Abdulxayeva M.U.
teacher
Department of Primary Education Methodology
Kokand State Pedagogical Institute*

OPINIONS OF SCIENTISTS ON LANGUAGE AND SPEECH

Annotation. This article discusses the different aspects of language and speech. Information about the development periods of language and speech and about the language and speech of great thinkers such as Alisher Navoi, Yusuf Khos Hajib, Abu Nasr Farabi, Ibn Sina, Amir Timur about language and speech is given.

Key words: spiritual maturity, language, speech, thinking, stability, variability, speech culture.

“Inson ma‘naviy kamolotga erishuvda, jamiyatning madaniy – ma‘rifiy rivojida ona tilining o‘rni favqulodda muhimdir. Til milliy ma‘naviyat, ma‘rifat va madaniyatning eng holis va xira tortmas ko‘zgidir. Hadisi shariflarda “Kishining zebu ziynati, go‘zalligi uning tilidadir” deyiladi [Maxmudov, 2007: 3].

Inson aqliy faoliyatining eng oliy mahsullari, tafakkur “mevalari” til va nutq orqali yuzaga chiqadi. Biz nutq haqida ma‘lumot berishdan avval til va nutqni bir-biridan farqlab olishimiz lozimdir. Sababi “til” va “nutq” degan terminlar ko‘pincha bir xil ma‘noda ishlatiladi.

“Til va nutq hodisalarini o‘zaro farqlab yondashish dastlab VIII-IX asrlarda shakllangan arab tilshunosligining til o‘rganish usullarida, keyinchlik esa V.Glumboldtning tildagi “energio” (harakat, jarayon, kuch) va “ergon” (mahsulot), A.Shteyntalning tildagi “barqaror mohiyat” va “harakatdagi kuchlar”, Boduen de Kurtenening “tildagi barqarorlik va o‘zgaruvchanlik” haqidagi ta‘limotlarida uchramiz. Lekin til bilan nutq hodisalarini va ularga hos birliklarni tom ma‘noda ilmiy – nazariy hamda amaliy farqlash; til va nutq

birliklarining mohiyatini ochish yo'llari, "til" va "nutq" tushunchalariga batamom yangi mazmun berilishi F. de Sosyur va uning izdoshlari yaratgan ta'limot bilan bog'liqdir" deb o'rganamiz[Ne'matov, Bozorov, 1993: 7].

Lekin "til va nutq odobi, nutqiy ma'daniyat, nutq san'ati haqidagi fikrlar, ayniqsa, Alisher Navoiy ijodida yuqori darajada aks etgan"[Omonturdiyev, Abduraimova, 2016: 14] ini ko'rishimiz mumkin. Masalan, A.Navoiyning muhtasham "Hamsa" sining barcha dostonlari (alohida-alohida boblar) da, "Mahbub ul-qulub", "Muhokamat ul-lug'atayn", "Nazm ul-javohir" va boshqa ko'plab asarlarida so'zning buyuk qudrati va nutq mahoratining xosiyatiga oid betakror fikrlarni bayon qilgan[Maxmudov, 2007: 8]. Ayniqsa, "Muhokamat ul – lug'atayn" asarini o'qib o'rganib chiqsak. Bu asar o'zbek tilining bitmas tunganmas fikr bayon qilish imkoniyatlariga ega ekanligini, uning har qanday fikrni ham nazmda to'la va chiroyli ifoda etishga qodirligini ilmiy va amaliy dalillar asosida isbot qilib beradi. Ushbu asarda A.Navoiy ko'ngilni dengizga, so'zni durga, so'zlovchini esa g'avvosga qiyoslaganini ko'rishimiz mumkin. Demak bu fikrlardan bilinadiki til – umumiylikka, nutq esa xususiylikka egadir.

Bundan tashqari A.Navoiy o'zining "Mahbub ul-qulub" asarida shunday deydi: "Til muncha sharaf bila nutqning olatidur va ham nutqdirki, gar nopisand zohir bo'lsa, tilning ofatidur..."[Navoiy, 1998: 94] ya'ni, tilning shunchalik sharafi bo'lgani bilan u nutqning qurolidir, agar u o'rinsiz ishlatilsa, tilning ofatidir deya ta'rif berganliklarini ham ko'rishimiz mumkin. Shunday ekan bola nutqini rivojlantirish, eng avvalo, til qobiliyatini shakllantirishni talab qiluvchi muloqot shakllarini rivojlantiruvchi demakdir (A.A.Leont'ev)[Babayeva, 2018: 432]

Olam ahlini hayrat barmog'ini tishlashga majbur qilgan Abu Nasr forobiy, Abu Rayhon Beruniy, Ibn Sino, Mahmud Zamaxshariy kabi ulug' allomalarimiz nutqning inson hayotidagi o'rni haqida ko'plab fikrlarni bayon qilganlar[Maxmudov, 2007: 7]. Masalan, Abu Nasr Forobiy "Fozil odamlar shahri" asarida inson fozilligining muhim belgilaridan biri sifatida quvvai notiqqa (nutq quvvatini) ajratadi. Uning fikricha, inson dunyoga kelishi bilan so'zni boqadigan quvvatga ega bo'ladi. Bu g'izolantiruvchi quvvat sanaladi. Undan so'ng inson o'z takomili yo'lida turli quvvatlarni qo'lga kiritadi. Masalan, mutoxayyila quvvati (hayol qilish, umumlashgan obrazlar yaratish), aql quvvati va boshqalar. Insonning olamni bilish jarayonida notiqqa quvvatining xizmati katta ekanligini ta'limda ta'kidlaydi [Maxmudov, 2007: 8].

Nafaqat Sharq, balki butun dunyo tib ilmida o'ziga munosib taxt yaratgan buyuk bobomiz Ibn Sino inson hayvondan aqli va tili bilan farq qilishini, shuning uchun insonning eng barkamoli - oqil va so'zga chechani ekanligini aytadi[Aliybek, 2003: 12].

Ulug' bobokalonimiz Amir Temur nutqiy ifodaning aniqligi va rostligini yuksak qadrlagan, boshqalardan ham shuni talab qilgan[Nurmonov, Mahmudov, 2000: 8].

Yusuf Xos Hojib o'zining "Qutadg'u bilig" (Saodatga eltuvchi bilim) asarida tilga quyidagicha ta'rif beradi: "uquv va bilimning tilmochi, tarjimoni tildir. Kishiga ro'shnolik, yaxshilik va ezguliklar til tufayli keladi, buni yaxshi bilib olish kerak. Qut-izzatni ham, obro'-e'tiborni ham kishi til orqali topadi. Agar tilga e'tibor bermasa, uni noo'rin qo'llasa, odam boshining yorilishi hech gap emas"[To'xliyev, 2017: 16].

Asrimizning 20-30-yillaridan boshlab nutq, nutq madaniyati ilmiy problema sifatida jamoatchilik e'tiborini torta boshladi. 50-yillarning oxirlaridan boshlab esa nutq madaniyati tilshunoslikning o'z tekshirish ob'yektiga ega bo'lgan maxsus sohasi sifatida shakllana boshladi. Nutq madaniyatiga oid problemalarni tekshirish bo'yicha rus olimlaridan V.V.Vinogradov, E.D.Polivanov, B.A.Larin, S.I.Ojegov, V.G.Kostamarov va ayniqsa G.O.Vinokurlarning xizmatlari nihoyatda katta.

Nutq so'zining ma'nosi (arabcha) fikrni so'z orqali ifodalash deganidir.

Nutq – kishi faoliyatining bir turi bo'lib, o'zaro aloqa va xabar almashinish, hamda o'z fikrini his – hayajon bilan ifodalash va boshqalarga ta'sir etish kabi vazifalarni bajaradi.

"Nutqning shakllanishi bolaning umumiy rivojlanishining ehtimol eng muhim shartidir. Nutq – bosh miya tomonidan ta'minlanadigan muhim oliy ruhiy vazifadir va uning rivojlanishida kuzatiluvchi har qanday og'ishlarga vaqtida e'tibor berilishi lozim"[Nazarova, 2017: 66]. Haqiqatdan ham nutq bolaligimizdan sekin astalik bilan rivojlanib boradi. Kimdadir tez, kimdadir esa sekin astalik bilan shakllanadi. Bu ayniqsa, boshlang'ich sinf o'quvchilarida yaqqol namoyon bo'ladi. Shu sababli ham boshlang'ich sinfda o'tiladigan barcha darslarning tag zaminida nutq o'stirish jarayoni muhim o'rin egallaydi. Chunki, o'quvchilarning o'qishi, yozishi, o'z fikr mulohazalarini, tasavvur va tushunchalarini boshqalarga yetkaza olishligi ularning nutqini qay darajada rivojlanganligi bilan bog'liqdir.

Xulosa qilib shuni aytishimiz mumkinki ushbu maqola orqali biz til va nutqning farqli tomonlarini, qaysi olim qanday ta'riflaganligini, til va nutq tushunchalari nechanchi arslarda rivojlanganligini bilib olishimiz mumkin. Biz ushbu tushunchalarning farqli tomonlarini o'rganishimizning sababi shundaki, boshlang'ich sinfda o'quvchilarning o'qishi, yozishi, o'z fikr mulohazalarini, tasavvur va tushunchalarini boshqalarga yetkaza olishlik jarayonida nutq muhim ahamiyatga egadir.

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*Abdumalikov U.
q.x.f.f.d.
senior teacher
Andijan Institute of Agriculture and Agrotechnologies
Soliev Sh.
assistant
Andijan Institute of Agriculture and Agrotechnologies*

DETERMINATION OF ECONOMICLY USEFUL CHARACTERISTICS OF NEW COTTON SYSTEMS

Annotation. In this article, cotton plant species 16, 111, 114, which have profitable household marks between newly created cotton plant species, are selected and they are recommended to test as testing species.

Key words: cotton, yield, experiment, selection, soil, water, boll, fiber, nurseries.

Creation of new cotton varieties is very important in the development of cotton production in our republic. Therefore, it is an urgent task to create new varieties and suitable agro-technologies that provide a competitive, early, high-yielding, high-quality cotton crop that meets the requirements of world standards, not only in Andijan region, but also in all regions of the Republic.

Taking this into account, scientists: Saydaliev H., Tojiboev A., Haliqova M. (1). those who have succeeded in creating new varieties by studying the beneficial characteristics of the lines created by individual selection.

It is necessary to create new cotton varieties with 10-15 percent advantages over the previous ones and introduce them into production using the continuous process of selection. Taking this into account, we studied the speed of ripening, productivity and fiber quality of the existing ridges in the years 2021-2023. The experiment was conducted at PSUEAITI Andijan scientific experimental station.

The soil of the experimental field is light gray, the mechanical composition is medium old, irrigated, not saline. Sizot waters are located 4-5 m below the surface of the earth. The experiment consisted of 4 returns, 90x20x1 order, 8 options and was systematically placed in one layer in the field. Each option was planted in 4 rows. The following results were obtained from the experiment.

It is known that productivity is one of the main results of the experiment. The data obtained on the productivity of the studied ridges are presented in Table 1. According to the data, the 114th ridge (42.6ts/ha) and 11th ridge (41.4ts/ha) gave the highest yield among the ridges, and the sample yielded 3-4ts/ha more than the variety

Among the ridges, Ridge 16 (37.0 t/ha) and Ridge 18 (36.1 t/ha) showed low yields compared to the model and compared to other ridges.

The rest of the ridges yielded a little more than the model and showed their productivity. According to the conclusions of a number of scientists who have studied the productivity of ridges, the appearance of fertile ridges in the next stages depends on the characteristics of the parent forms that participated in the crossbreeding. Similar results were obtained in our experience. Table 2 provides information on the benefits of the study to the economy.

Table 1

Productivity of ridges according to returns, ts/ha.

Variant	Template and ridges	Returns				
		I	II	III	IV	Average
1	Andijan-35 (template)	36,4	38,0	36,9	36,4	37,2
2	11	40,4	42,3	40,9	42,0	41,4
3	13	39,0	38,3	40,4	38,3	39,0
4	16	35,9	38,2	37,8	36,1	37,0
5	18	37,0	35,8	36,3	35,3	36,1
6	111	39,4	38,1	38,9	39,2	38,9
7	114	43,0	41,6	40,9	44,9	42,6
8	117	39,2	37,9	39,1	37,8	38,5

$$HCP_{05}=1.73\Omega/\Gamma a$$

Based on the data, the 114-Tizma (7.4 g) and 13-Tizma (7.0 g) lines were singled out for having a high index in terms of the weight of one bag of cotton. The 18th Ridge (4.9 g) gave a lower indicator. It was determined that the highest indicator of fiber output was in 16-Tizma (39.2%). A relatively lower rate was in the 13th Ridge (34.9%).

It is known that the length of the fiber is an important feature in the division of fiber into industrial types.

Table-2

Useful signs of ridges to the farm

Variant	Template and ridges	Weight of 1 cotton bag, g	Fiber output, percentage	Fiber length, mm
1	Andijan-35 (template)	6,6	36,1	32,7
2	11	6,2	38,8	34,0
3	13	7,0	34,9	32,9
4	16	7,0	39,2	33,6
5	18	4,9	37,5	32,9
6	111	5,8	36,7	34,2
7	114	7,4	37,9	35,3
8	117	6,1	38,2	32,8

When determining the fiber length of the ridges, the longest fiber was the 114th Ridge (35.3 mm). It was found that the 117th Line (32.8 mm) has a lower indicator on this mark.

We analyzed the fiber quality of the ridges. The obtained data are presented in Table 3. Analyzing the technological properties of Tizma fibers, it was found that 111-Tizma, 16-Tizma and 114-Tizma have high fiber quality.

In the future, the 16-Tizma, 111-Tizma and 114-Tizma, which have embodied signs of useful traits for the farm, were selected for study in the field of variety testing because of their special importance. Those who have studied for three years at the selection variety testing nursery and have a high indicator of useful characteristics for the economy compared to the model variety are submitted to the State variety test. It was found that 16-Tizma (4.1) and 18-Tizma (4.2) have high fiber quality according to the microneur index.

Table-3

Technological characteristics of the fibers of the ridges

Variant	Template and ridges	Metric number	Fiber cooked gi g/force	Fiber maturity, coefficient	Толани нисбий узулиш узунлиги, г.к/текс	Fiber type	Microw ave
1	Андижон-35 (андоза)	5620	4,7	214	26,9	V	4,6
2	11	5860	4,6	212	27,6	IV	4,4
3	13	5600	4,5	206	25,8	V	4,5
4	16	5920	4,7	216	28,5	IV	4,1
5	18	5590	4,5	215	25,8	V	4,2
6	111	6010	4,4	211	27,1	IV	4,4
7	114	6000	4,6	213	28,3	IV	4,3
8	117	5590	4,5	206	25,7	V	4,2

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*Abdumurodov S.O.
Jo'rayev M.Sh.
talaba
Fakultet: Buxgalteriya
Ilmiy rahbar: Husanov F.*

IQTISODIYOTDA MATEMATIK MODELLASHTIRISHNING O'RNI

Annotatsiya. Ushbu maqola iqtisodiyotdagi matematik modellashtirishning o'rni, u nima ekanligi va jamiyatimizga qanday foyda keltirishi, matematik modellashtirish modellashtirishning boshqa turlaridan qanday farqlanishi haqidadir. Iqtisodiy vaziyatni qayta ko'rib chiqishni talab qilgan global inqiroz bilim va tegishli iqtisodiy va matematik modellar bizni iqtisodiy fan va iqtisodiyotdagi matematik modellashtirishning kelib chiqishiga qaytishga majbur qiladi. Maqolada tarmoqlararo muvozanatning dinamik modeli tamoyillari haqida asosiy ma'lumotlar keltirilgan.

Kalit so'zlar: modellashtirish, model, iqtisodiy-matematik modellar, optimal dasturlar, modeli iqtisodiy muvozanat.

*Abdumurodov S.O.
Jorayev M.Sh.
student
Faculty: Accounting
Scientific leader: Husanov F.*

THE ROLE OF MATHEMATICAL MODELING IN THE ECONOMY

Abstract. This article is about the role of mathematical modeling in the economy, what it is and how it benefits our society, how mathematical modeling differs from other types of modeling. The global crisis, which demanded a review of the economic situation, forces us to return to the origins of economic science and mathematical modeling in economics, knowledge and relevant economic and mathematical models. The article provides basic information about the principles of the dynamic model of intersectoral balance.

Key words: modeling, model, economic-mathematical models, optimal programs, model economic equilibrium.

KIRISH

Matematik modellashtirish iqtisodning aniq sohasi emas, balki bu iqtisodiy tahlil uchun yondashuv bo'lib, unda tahlilchi muammoni bayon qilishda matematik belgilardan foydalanadi va shuningdek, fikr yuritish uchun ishlatiladigan ma'lum matematik teoremalarga asoslanadi. Iqtisodiy tahlilda prognoz diagramma yordamida tuziladi. Masalan, raqobatbardosh bozorda taklif

ko'paysa, tovarning narxi tushadi. Biroq, uning ortida har qanday bozor ishtirokchisi tahlil qilishi mumkin bo'lgan juda keng tarqalgan iqtisodiy sezgi bor. Iqtisodchi, shuningdek, iqtisodiy bashorat qilish, matematikadan foydalanish zarur bo'lgan miqdor haqida bashorat qilishi kerak. Ba'zida tabiatan matematik bo'lmagan iqtisodiy tahlil kutilayotgan o'zgarishlar yo'nalishini va tabiatan miqdoriy bo'lmagan o'zgarishlarni bashorat qilish uchun ham foydali bo'lishi mumkin. Asosiy iqtisodiy-matematik usullar:

- Matematik statistika usullari
- Ekonometrik usullar
- Optimal dasturlash
- Bozor iqtisodiyotiga taalluqli usullar.

Matematik statistika usullariga: dispersion tahlil, korrelyatsiya tahlili, regressiya tahlili, omilli tahlil va indekslar nazariyasi.

Ekonometrik usullarga: iqtisodiy o'sish nazariyasi, ishlab chiqarish funksiyasi nazariyasi, talab va taklif tahlili, bir va ko'p omilli tahlil, eng kichik kvadratlar.

Optimal dasturlashga: chiziqli dasturlash, kasr-chiziqli dasturlash, butun sonli dasturlash, dinamik dasturlash, stoxastik dasturlash.

Bozor iqtisodiyotiga taalluqli usullarga: erkin raqobat modellari, firmalarga taalluqli modellar, o'yinlar nazariyasi kabilar kiradi. Matematik iqtisod - bu nazariyalarni ifodalash va iqtisodiyotdagi muammolarni tahlil qilish uchun matematik usullarni qo'llashdir. Ko'pincha, bu qo'llaniladigan usullar oddiy geometriyadan tashqarida bo'lib, differensial va integral hisoblar, farq va differentsial tenglamalar, matritsalar algebrasi, matematik dasturlash yoki boshqa hisoblash usullarini o'z ichiga olishi mumkin. Bu yondashuv tarafdorlarining ta'kidlashicha, u nazariy munosabatlarni qat'iylik, umumiylik va soddalik bilan shakllantirish imkonini beradi.

ADABIYOTLAR TAHLILI

Matematika iqtisodchilarga keng ko'lamli va murakkab mavzular bo'yicha mazmunli, sinovdan o'tkaziladigan takliflarni shakllantirish imkonini beradi, ularni norasmiy tarzda ifodalash oson emas. Bundan tashqari, matematika tili iqtisodchilarga matematikasiz imkonsiz bo'ladigan bahsli yoki bahsli mavzular haqida aniq, ijobiy da'volar qilish imkonini beradi. Iqtisodiyot nazariyasining aksariyati hozirgi vaqtda matematik iqtisodiy modellar, taxminlar va natijalarni aniqlashtirish uchun tasdiqlangan va soddalashtirilgan matematik munosabatlar to'plami nuqtai nazaridan taqdim etilgan.

Maqsad muvozanatini optimallashtirish muammolari, xoh uy xo'jaligi, xoh biznes firmasi yoki siyosatchi statik (yoki muvozanat) tahlil, unda iqtisodiy birlik (masalan, uy xo'jaligi) yoki iqtisodiy tizim (masalan, bozor yoki iqtisodiyot) o'zgarmas tarzda modellashtiriladi. Rasmiy iqtisodiy modellashtirish 19-asrda iqtisodiy xatti-harakatlarni ifodalash va tushuntirish uchun differentsial hisob-kitoblardan foydalanish bilan boshlandi, masalan, foydalilikni maksimallashtirish, matematik optimallashtirishning dastlabki iqtisodiy

qo'llanilishi. Iqtisodiyot 20-asrning birinchi yarmida intizom sifatida ko'proq matematik bo'lib qoldi, lekin Ikkinchi jahon urushi atrofidagi davrda, o'yin nazariyasidagi kabi yangi va umumlashtirilgan metodlarni joriy etish iqtisodiyotda matematik formulalardan foydalanishni ancha kengaytiradi.

Jon Meynard Keyns, Robert Xaylbroner, Fridrix Xayek va boshqalar insonning xulq-atvori uchun matematik modellardan keng foydalanishni tanqid qilib, insonning ba'zi tanlovlarini matematikaga qisqartirib bo'lmaydi, deb ta'kidladilar. Model so'zi lotincha modulus so'zidan olingan bo'lib, o'lchov, me'yor degan ma'noni anglatadi. Bu so'z tor ma'noda: o'rganilayotgan obyekt, jarayon yoki hodisaning muhim xususiyatlari, xossalarini aks ettiruvchi yordamchi obyekt ma'nosida; keng ma'noda esa: biror obyekt yoki obyektlar tizimining namunasi ma'nosida qo'llaniladi.

Modelning haqiqiyliги to'plangan ma'lumotlar hajmi, aniqlik darajasi, tadqiqotchining malakasi va modellashtirish jarayoni, aniqlanadigan masalaning xarakteriga bog'liq. Shuni ham unutmaslik kerakki, juda soddalashtirilgan model qo'yilgan talablarga to'liq javob bermaydi va aksincha, murakkab model esa uni yechish jarayonida qiyinchiliklar tug'diradi. Iqtisodiyotdagi obyektlarni matematik modellar yordamida kuzatish mumkin. Bu tushuncha modellashtirish deyiladi. Oxirgi yillarda L. Valras tomonidan ishlab chiqilgan umumiy iqtisodiy muvozanat modeli aslida uni tasvirlagan birinchi matematik model edi.

Mikroiqtisodiy ko'rsatkichlar yordamida makroiqtisodiy tizimning xatti-harakatini tavsiflovchi har bir element uchun alohida tenglama ajratiladi. Uning iqtisodiy matematik modellarga qo'shgan hissi uni qo'llashda bo'ldi. Ishlab chiqarishdagi tannarxning tarkibini tavsiflovchi texnologik koeffitsientlar algebraik tenglamalar tizimi orqali iqtisodiyotni tavsiflash uchun birliklar. Bu yondashuv hali ham zamonaviy iqtisodiy matematik modellashtirishning asosidir. Modellashtirishni chuqurroq o'rganish uchun obyekt sifatida biror bir korxonani olsak, maqsadimiz ushbu obyektни ishlab chiqarish jarayonini o'rganish bo'lsa, bu holda model parametrlariga korxonani quvvati, ishlab chiqarish omillari, xomashyo, ishchilar soni, asosiy fondlar, ishlab chiqarish dasturi va hokazolar kiradi va model ishlab chiqarish funksiyasi ko'rinishida ifodalanadi.

NATIJARLAR

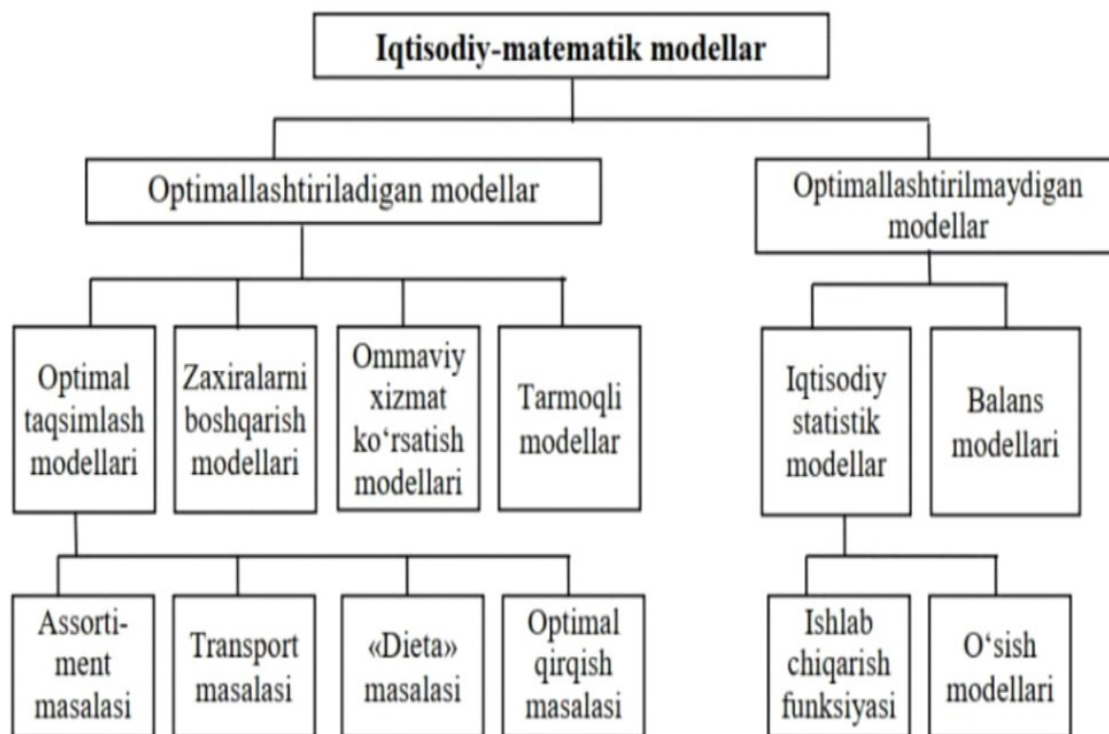
Parametrlar sifatida ishchilarning soni, turmush darajasi, oladigan daromadi, ish sharoitlari, demografik tarkibi va boshqa parametrlar qo'llaniladi. Modellashtirishning universal usul sifatida boshqa usullarga qaraganda afzalliklari mavjud. Masalan: modellashtirish katta va murakkab tizimni oddiy model yordamida ifodalashga imkoniyat beradi. Lekin shuni unutmaslik kerakki o'ta soddalashtirilgan model qo'yilgan talablarga javob bermasligi va uning yordamida qilingan hisob-kitoblar noto'g'ri chiqishi mumkin.

O'ta murakkab model esa, o'z navbatida masalani yechish jarayonida ko'p qiyinchiliklar tug'diradi. Shuning uchun modelga faqat obyektни eng asosiy xarakterli, muhim omillarini kiritish zarur. Iqtisodiy-matematik modellashtirishda matematik statistika usullaridan keng foydalaniladi. Bu usullardan tahlil

qilinayotgan ko'rsatkichlarning o'zgarishi tasodifiy jarayon sifatida qabul qilinganda foydalaniladi. Statistika usullar ommaviy takrorlanib turuvchi hodisalarni o'rganishda asosiy vosita hisoblanadi hamda iqtisodiy ko'rsatkichlarni prognoz qilishda katta o'rin egallaydi. Iqtisodiy tahlilda matematik-statistika usullaridan eng keng tarqalgani - juft va ko'p omilli korrelyatsiya va regressiya tahlili usullaridir. Ekonometrik usullar iqtisodiyot, matematika va statistikaga taalluqli bo'lgan bilimlar sinteziga asosan tashkil topadi.

TAHLIL VA MUHOKAMA

Iqtisodiyotda matritsa ko'rinishidagi model bo'lib, u xarajatlar va ishlab chiqarish o'rtasidagi bog'lanishni eng sodda holda ifodalaydi. Zarur hisobkitoblarni amalga oshirishni qulayligi, iqtisodiy asoslashlarni aniqligi - matritsaviy modellarni asosiy xususiyatlaridir. Iqtisodiyotda eng keng qo'llaniladigan modellardan biri - bu iqtisodiy matematik modellardir. Matematik modellashtirish - iqtisodiy jarayonlarni tenglamalar, tengsizliklar, funksional, mantiqiy sxemalar orqali ifodalash deb tushuniladi.



Matematik modellashtirish keng ma'noda o'z tabiatiga ko'ra turli, lekin o'xshash matematik bog'lanishlar bilan tasvirlanuvchi jarayonlarni o'rganuvchi tekshirish va izlanishlar usulidir. Zamonaviy fan-texnika taraqqiyoti sharoitida matematik modellashtirish va uning muhim iqtisodiy usullari rejalashtirish va boshqaruv tajribasida eng asosiy o'rinni egallaydi. Iqtisodiy-matematik modellar funksional va strukturali bo'lishi mumkin.

Funksional modellar kirish va chiqish parametrlarini bog'lanish funksiyalarini aks ettiradilar. Strukturali modellar murakkabroq bo'lib, tizimni

ichki strukturasi ifodalab, ichki aloqalarni aks ettiradi. Funktsional va strukturaviy modellar bir-birini to'ldiradi. Bir tomondan funktsional modellarni o'rganishda obyekt ichki strukturasi haqida gipotezalar yuzaga keladi va strukturali modellashtirishga yo'l ochadi.

Funksional (yoki kibernetik) modellarning asosiy vazifasi obyekt mohiyatini namoyon bo'lishining muhim ko'rinishlari bo'lgan faoliyat, ishlash jarayoni, xatti-harakati orqali aniqlashdir. Bunda ichki struktura o'rganilmaydi, ichki struktura haqidagi axborotda esa foydalanilmaydi. Funktsional model obrazi qilib "qora quti"ni olish mumkin. Bunda "kirish" x qiymatini berib, "chiqish" y qiymatini olish mumkin. Funktsional model tuzish - x va y ni bog'lovchi D operatorni topish hisoblanadi: $Y=D(x)$. Xuddi shu kabi turli matematik modellar iqtisodiyotda keng qo'llaniladi. Matematik modellashtirishlarsiz iqtisodiyot tushunarsiz va murakkab ko'rinishga kelib qoladi. Shuning uchun iqtisodiyotni modellashtirishlarsiz tasavvur qila olmaymiz. Ekonometrika iqtisodiy ma'lumotlarni o'lchash bilan shug'ullanadi. Iqtisodiy o'zgaruvchilar o'rtasidagi bog'liqlikni isbotlash uchun statistik usullardan foydalangan holda empirik kuzatish bilan shug'ullanadi. Statistik usullar asosan faraz va farazlarni tekshirishdan iborat.

Matematik iqtisod esa matematikani iqtisodiy tahlilning nazariy jihatlariga tatbiq etishdir. Biroq, biz ikkalasi o'rtasidagi munosabatni ko'rib chiqsak, empirik tadqiqotlar va nazariy tahlillar yonma-yon boradi, chunki ular ko'pincha bir-birini to'ldiradi va mustahkamlaydi. Shuningdek, u nazariyalarni qo'llashdan oldin haqiqiylikni empirik ma'lumotlarga qarshi sinovdan o'tkazish imkonini beradi.

XULOSA

Bozor munosabatlari sharoitida iqtisodiy jarayonlar ham mikro darajada ham makro darajada o'zaro bir-biri bilan uzviy bog'lanishda bo'lganligi sababli, ularning bog'lanishlari iqtisodiy jarayonlarni aks ettiruvchi ko'rsatkichlarning bog'lanishlari yordamida tahlil etiladi. Bog'lanishlarning tahlili esa jarayonlarni aks ettiruvchi u yoki bu ekonometrik modellar yordamida amalga oshiriladi. Buning uchun yuqorida aytib o'tilgan modellashtirishning barcha bosqichlari amalga oshiriladi va ekonometrik model tuziladi. Ekonometrik modelda iqtisodiy jarayonga ta'sir etuvchi omillar, ularning muhimligi, jarayonning rivojlanish tendensiyalari aniqlaniladi. Tuzilgan va o'tgan davrdagi jarayonlarni aks ettiruvchi ekonometrik modellar endi prognozlash masalalarini hal etishda foydalaniladi, ya'ni omil belgilarning kelajakda qabul qilishi mumkin bo'lgan qiymatlarida jarayonda qanday o'zgarishlar bo'lishi mumkinligi masalasi yechiladi.

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*Abdumutalipova X.T.
senior teacher
Andijan Institute of Agriculture and Agro-Technology
Uzbekistan, Andijan
Olimboyeva Sh.A.
student
Andijan Institute of Agriculture and Agrotechnology
Uzbekistan, Andijan*

IMPORTANCE OF IRRIGATION IN STRAWBERRY GROWING IN UZBEKISTAN AND ITS PROSPECTS

Abstract. This article provides information on the history of strawberry plant development in Uzbekistan, status of strawberry production worldwide, cultivation technology of local and introduced varieties, productivity, and classification of promising varieties.

Key words: Strawberry, variety, seedling, state register, variety classification, fruit.

Introduction. There are more than 50 types of strawberries in the world, of which the forest, mountain, plain, Sakhalin species are found in Russia, and the eastern Bukhara species are found in Central Asia. The indicated species are not of great industrial value, but the inhabitants of these regions eat their fruits. Types of strawberries called forest, Sakhalin and kulubnika are used in selection works to create immune, winter-resistant, and disease-resistant varieties. These species are widespread in the European part of Russia, the Far East, Yakutia, Sakhalin. Flowers and fruits are small.

Bukhara strawberry can be found along streams and ditches in the Pamirs. The bush is 6-15 cm low, the leaves are broad-backed, egg-shaped, short-ribbed, and the edges are large-toothed. The inflorescence has few flowers (1-5 pieces), the inflorescence is thin, hairy, and the flowers and fruits are small.

The large-fruited strawberry was created mainly by crossing the Chilean type with the Virginia type, and is widespread. It is distinguished by its high yield and taste.

From 2012 to 2016, the production volume of strawberries in the world increased by 23.5%, or the average yield increased from 21.4 t/ha to 22.7 t/ha.

China (41.8%), the USA (15.4%), Mexico and Egypt (5.5%) are the leading countries in strawberry cultivation.

№	States	Productivity, mln.t
1	China	3,8
2	USA	1,4
3.	Mexico	0,5
4	Egypt	0,5
5	Turkey	0,4

6	Spain	0,4
7	The rest of the countries	2,1

FAOSTAT information

Cultivated strawberries were cultivated in Uzbekistan from the end of the 19th century to the beginning of the 20th century. Since 1932, N.N. Balashov has been carrying out scientific research on the biology, selection and agrotechnics of the strawberry plant at the Agricultural Experimental Station of Uzbekistan.

During the years 1947-1976, on the basis of the expanded plan, scientific research works were carried out on the selection and agrotechnics of strawberry varieties under the leadership of S.I. Yagudina.

In Tashkent, Namangan, Andijan, Fergana and Samarkand regions of the republic, the areas of large-scale planting of strawberries are expanding. Strawberry grows well even in the Republic of Karakalpakstan and gives a high yield.

According to the information of the State Statistics Committee of the Republic of Uzbekistan in 2020, the total area planted with strawberries was 1040 hectares, of which the yielding area is 967 hectares. Productivity is 5318.5 tons, the average per hectare is 52 s/ha.

Currently, the State Register of agricultural crops recommended for planting in the territory of the Republic of Uzbekistan includes Uzbekistanskaya, Kulver, Tashkentskaya, Muto (Krimskaya), Zenga-Zengana varieties of strawberries. In 2018, Bountiful, Redgauntlet, Cobra varieties were included in the State Register.

Years	Total area		Productivity	
	Planted area, hectares	Production area, ha	Total productivity, tons	Average hectare to s/ha
2012	500	460	1610,00	35
2013	550	500	1800,0	36
2014	600	550	2090,0	38
2015	620	600	2400,0	40
2016	680	620	2604,0	42
2017	750	680	3060,0	45
2018	840	750	3750,0	50
2019	967	809	4368,0	52
2020	1040	967	5318,5	55

One of the main conditions affecting the growth, development and productivity of strawberries is the correct selection and placement of varieties in plantations.

Choosing a good variety when establishing a new strawberry orchard is one of the main conditions for obtaining a high yield. It is important that the new variety is productive, resistant to cold, free from diseases and pests, its fruit is large, beautiful, tasty, suitable for consumption and processing when freshly

picked, its ripening period is clear, as well as the content of vitamins and other biological substances. It is also appreciated for its preservation.

According to the results of the inspection and selection of varieties, the following varieties are recommended: fairy tale and medium fairy tale - Miss Uzbekistan, Pamyat Shredera, Uzbekistanskaya, medium evening - Bountiful, Redgauntlet, Cobra, Zenga-Zengana, etc. Below is a classification of common varieties.

Uzbekistanskaya-Uzbekistan variety. The bush is large, spreading, with many leaves. The leaves are green, round-oblong, not swollen, self-pollinating variety. The flowers are bisexual, 95% of them have finished fruiting. The flower is multi-flowered. The first fruit is very large (up to 50 grams), wide oval, the later ones are conical, ribbed. The fruit is red, sour-sweet, aromatic and delicious, the flesh is medium dense. It contains 1.5-8.0% sugar, 0.3-0.805% acids, 55-87 mg % vitamin "C". The average weight of the fruit is 8-10 g. High-yielding variety (80-160 kg per 100 m² of land). The fruits ripen in the first ten days of May. Transportable. The fruit picking period lasts 25-30 days. Dessert variety, suitable for processing. It is mainly distributed in Uzbekistan and the south of Kazakhstan.

The main condition for growing strawberries in the conditions of the republic is to supply the crop with water. Frequent rainfall cannot satisfy the plant's demand for moisture during the growing season. Strawberries are irrigated 13-24 times during the growing season, with each irrigation consuming 300-800 m³/ha of water per hectare. In the gravelly lands of the Fergana Valley and Bukhara, Kashkadarya and Surkhandarya regions, irrigation should be carried out frequently, but in small quantities, and in the heavy soil lands of the Tashkent region, less often, but until the crop is full. Watering time depends on air temperature and soil moisture. The first watering is in April, when the fruit begins to ripen, but when spring comes early and dry, it is watered once in March, 3-4 times in May, 2-3 times in June, 3 times in July, 2 times in August. During the ripening period, the furrow is irrigated.

In September and early October, the soil with the plant should be moistened at least twice a week.

Clean water should be used to moisten the soil. As a means for irrigation, you can use various devices. Its main disadvantage is the need to spend additional time and effort on watering. Alternatively, a hose can be used, but then gardeners face the problem of wasting water. It is forbidden to water strawberries with ice water from a well or a well in autumn, the risk of death of the plant is high.

Drip irrigation. This method allows water to be delivered directly to the strawberry roots, which allows the tool to be used throughout the growing season.

Advantages of drip irrigation: low water consumption; the ability to independently determine the dose of water for irrigation; save physical effort and time.

Often, gardeners organize a drip irrigation system, in their plots there is not a single garden bed, but an entire strawberry plantation.

The sprinkler method can be used to care for autumn strawberries. It consists of a mobile or stationary device - equipment on the site of a sprinkler for irrigation. Sprinklers are available in round, rotary, oscillating or fan types. The amount of irrigated area depends on the selected device. In expensive models, timers and sensors are installed for ease of use.

Conclusion. The strawberry plant is the first among berries consumed by the population. It is highly valued for its rapid onset of harvest, early harvest, productivity, growth in any terrain, unique fruit taste, pleasant smell, attractive appearance, nutritional value and nutritional value. Strawberry has a number of biological properties, it has the characteristic of good growth and development. The necessary complex biologically active substances contained in its fruit help to prolong the life of the human body by maintaining its ability to work at a high level.

Currently, our government has adopted several decisions and orders on the development of horticulture and viticulture in the republic for the period of 2012-2026. This makes it possible to expand fruit, berry and grape fields.

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*Abdumutalipova X.T.
senior teacher
Andijan Institute of Agriculture and Agro-Technology
Uzbekistan, Andijan
Olimboyeva Sh.A.
student
Andijan Institute of Agriculture and Agrotechnology
Uzbekistan, Andijan*

DRIP IRRIGATION IN ORCHARDS AND ESTABLISHMENT OF HEDGEROWS TO PREVENT WATER WASTAGE

Abstract. In this article, promising methods of irrigation in order to plant and care for seedlings of fruit plants, to prevent and eliminate unfavorable conditions and to create favorable conditions for their growth and development. Information is provided on the importance of tillage and planting of surrounding trees.

Key words: hydrocyclone, drip irrigation, intensive apple orchards, perennial trees, cultivation works, irrigation quantity and norm periods, infiltration furrow, ditch water.

Introduction. The role and importance of the agricultural sector in ensuring the food security of the population on a global scale is increasing day by day. In particular, in our country, it is an urgent issue to use the available resources and opportunities to provide the population with guaranteed agricultural products, to further increase productivity and interest, and to introduce scientific achievements and modern approaches to the field.

In this process, it was made a priority to increase the income per hectare of land from the current average of 2,000 dollars to at least 5,000 dollars. It was determined that we should widely introduce achievements in the field.

The growth, development and productivity of fruit plants largely depend on external environmental factors. In particular, climatic and soil factors have a great influence on the growth and development of fruit crops. This requirement is different during the year (spring, summer, winter, autumn) during growth and rest phases in different periods of plant age (seedling, yielding and senescence).

Light is considered the main factor of photosynthesis, it helps the growth and formation of plant organs, affects transpiration, direction of growing organs, etc. With the change of light, the plant soil and air temperature, humidity, chemical composition of the soil and microbiological environment change.

Table 1**Intensive apple orchard system**

№	Apple varieties	The number of planted seedlings	Planting schemes			
			4x0,8	4x1,2	4x2	4x3
1.	Golden delishes	1100	4x0,8	4x1,2	4x2	4x3
2.	Pink Ledi	193	4x0,8	4x1,2	4x2	4x3
3.	Gala	1640	4x0,8	4x1,2	4x2	4x3
4.	Argus	750	4x0,8	4x1,2	4x2	4x3
5.	Fuji	1875	4x0,8	4x1,2	4x2	4x3
6.	Krimpson Kreps	440	4x0,8	4x1,2	4x2	4x3
7.	Saltanat	192	4x0,8	4x1,2	4x2	4x3

Apple varieties are planted in 4 different planting schemes

Table 2**System of intensive plum orchard**

№	Varieties of plums	The number of planted seedlings	Planting scheme
1.	Ispolinskiy	550	4x3
2.	Чыorny bagira	780	4x3
3.	Samarkandskiy chyornosliv	340	4x3
4.	Leto	340	4x3

Plums are planted in the same planting scheme

When perennial trees that grow quickly and tall are planted around gardens and along highways between neighborhoods, they protect fruit trees from wind, heat and cold, spillage of crops in the wind, breakage of branches, autumn, in the winter and spring seasons, it protects them from frostbite, evaporation of soil moisture, soil salinity, and prevents the rise of the water level.

In order for hedgerows to withstand the wind, they must have the following characteristics:

- a) the orchard should be suitable for the soil and climatic conditions of the region where it will be established;
- b) it should be fast-growing, not branching widely and strong with high growth;
- c) should have sufficient density to protect against wind;
- g) the root should have a small size;
- d) it should not be infected with diseases and pests.

To protect the newly established gardens from animals and to mark the boundaries of the garden, it is advisable to fence the garden.



The number and frequency of irrigation in fruit trees depends on the depth of the ground water. The deeper the ground water, the better the fruit trees will drink fresh water and grow and develop better. Harvested apple trees are extremely intolerant of harmful salts, so it is recommended to irrigate such orchards once every two years with a floor of 5-10 hectares at a height of 50-60 cm. After 24 hours of infiltration furrow irrigation, salt rises as a result of water breaking up through capillaries. Therefore, it is necessary to carry out salt washing every year during the irrigation of fruit trees with water or during the growing season.

Summary. In order to plant and care for seedlings of fruit plants, to prevent and eliminate unfavorable conditions and to create favorable conditions for their growth and development, when a garden is established on large areas, ditches between gardens should be made in order to reduce the force of the wind. it is stated that planting poplars in two rows per year is good, that it is necessary to fight against diseases and pests in these orchards every year, otherwise they can become a source of diseases and pests, and the number of times of watering fruit trees, terms, it is very important to pay attention to the quality and maintenance of water.

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HISTORICAL LANGUAGE TEACHING METHODS: GTM, DM, AND ALM

Abstract. This article provides an overview of three historical language teaching methods: the Grammar-Translation Method (GTM), the Direct Method (DM), and the Audio-Lingual Method (ALM). The GTM, developed in the 19th century, focuses on grammar and vocabulary through translation exercises. The DM, emerging in the late 19th and early 20th centuries, emphasizes immersion in the target language for speaking and listening skills. The ALM, developed in the mid-20th century, emphasizes habit formation through repetition and reinforcement. While each method has strengths and weaknesses, contemporary language teaching approaches often combine elements from these historical methods to create a more effective learning experience.

Keywords: Historical Language Teaching Methods, Grammar-Translation Method (GTM), Direct Method (DM), Audio-Lingual Method (ALM).

Language teaching methods have evolved over the years, with various approaches being developed to help learners acquire a new language. Three prominent historical language teaching methods are Grammar Translation Method (GTM), Direct Method (DM), and Audio-Lingual Method (ALM). Each of these methods has its own unique characteristics and principles that have influenced language teaching practices.

The Grammar Translation Method, dating back to the 19th century, focuses on the translation of texts from the target language to the native language. It emphasizes grammar rules, vocabulary memorization, and translation exercises to help students understand and produce the target language. This method is often criticized for its lack of emphasis on communication skills and real-life language use.

The Direct Method, developed in the late 19th and early 20th centuries, aims to immerse students in the target language through the use of only that language in the classroom. It emphasizes oral communication, vocabulary acquisition through context, and real-life situations to help learners develop their language skills naturally. This method is known for its focus on speaking and listening skills, as well as its rejection of translation and grammar-based instruction.

The Audio-Lingual Method, popular in the mid-20th century, emphasizes the use of drills, repetition, and audio materials to help students acquire the target language. It focuses on developing habits through constant practice and reinforcement of language patterns. This method is often associated with

behaviorist theories of learning and is known for its structured and repetitive nature.

Despite their differences, these historical language teaching methods have all contributed to the development of modern language teaching approaches. Educators today draw on a variety of methods and techniques to create engaging and effective language learning experiences for students. Understanding the historical context and principles of these methods can provide valuable insights into the evolution of language teaching practices.

Historical language teaching methods have evolved over time, with various approaches emerging to address different aspects of language learning. Three prominent methods from the past include the Grammar-Translation Method (GTM), the Direct Method (DM), and the Audio-Lingual Method (ALM).

1. Grammar-Translation Method (GTM):

- Developed in the 19th century, the GTM focuses on teaching students grammar rules and vocabulary through translation exercises.
- Emphasizes reading and writing skills over speaking and listening.
- Involves memorization of vocabulary lists and grammatical structures.
- Critics argue that the GTM does not effectively develop communicative skills or fluency in a language, as it primarily focuses on translation and rote learning.

2. Direct Method (DM):

- Emerged in the late 19th and early 20th centuries as a reaction against the GTM.
- Advocates for teaching language directly through immersion in the target language, emphasizing speaking and listening skills.
- Encourages the use of real-life situations and context to facilitate language learning.
- Places importance on communication and interaction in the target language.
- Critics argue that the DM may lack structure and systematic grammar instruction, leading to potential gaps in learners' understanding of language rules.

3. Audio-Lingual Method (ALM):

- Developed in the mid-20th century, the ALM draws on principles of behaviorism and focuses on habit formation through repetition and reinforcement.
- Utilizes drills, pattern practice, and audio materials to reinforce language learning.
- Emphasizes accuracy in pronunciation and grammar.
- Advocates for the gradual introduction of new vocabulary and structures in a controlled manner.
- Critics argue that the ALM may lead to mechanical and rote learning, limiting students' ability to communicate creatively in the target language.

While these historical language teaching methods have played a role in shaping language education practices, contemporary approaches often incorporate elements from multiple methods to create a more dynamic and effective learning

experience. The shift towards communicative language teaching, task-based learning, and technology-enhanced instruction reflects a broader recognition of the importance of integrating various methodologies to meet the diverse needs of language learners.

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*Abdurasulova Sh.A.
master's student
Uzbekistan State World Languages University
Dadaxonova D.Z.
master's student
Uzbekistan State World Languages University
Dexqonova A.Yo.
master's student
Uzbekistan State World Languages University*

THE SIGNIFICANCE OF PODCASTS IN ENHANCING THE LISTENING SKILLS OF INTERMEDIATE LEVEL STUDENTS

Abstract. The emergence of podcasting platforms at the beginning of the 21st century has led to an easy access to authentic audio materials to be used in foreign language classrooms. Due to their real-life context and exposure to native speakers' accents, podcasts can be a potent tool for fostering language learners' listening proficiency. This quasi-experimental study investigates the efficacy of podcasts in enhancing the listening skills of intermediate level students. Employing the independent samples t-test, this research compares a control group with an experimental group, both subjected to pre-tests and post-tests. The findings of the study reveal a significant improvement in listening proficiency among the experimental group exposed to podcasts compared to the control group. These results underscore the importance of integrating podcasts into language learning curricula, particularly for intermediate learners. Current research contributes to the growing body of literature on the technology-enhanced language learning methods and offers practical insights for educators aiming to optimize listening skill acquisition in language classrooms.

Keywords: podcast, listening skills, educational technology, listening proficiency, language acquisition, authentic audio materials.

INTRODUCTION

Listening skills are undoubtedly fundamental in the language learning process as they facilitate comprehension, allowing learners to understand spoken language in real-life situations. According to Rost, the main distinction between high-achieving and low-achieving language learners is “their ability to use listening as a means of acquisition” (Rost, 2001:94). Listening comprehension can be improved with the help of a large amount of comprehensible aural input, called ‘extensive listening’. Extensive listening, which can be conducted outside the classroom learners using their own audio materials, provides opportunities to apply three important principles for effective listening practice: variety, frequency and repetition. One of the extensive listening materials that can support those principles are podcasts (a digital audio series that can be streamed or downloaded

online). Podcasts as authentic, culturally-rich and easily-accessible materials have been a significant source for improving listening comprehension, pronunciation and fluency of foreign language learners. However, integrating podcasts into curriculum may require additional time, appropriate content selection and necessary technologies such as smartphones or computers with a stable internet connection to listen to podcasts regularly. Due to above-mentioned challenges, podcasting is rarely incorporated as a foreign language teaching material in Uzbek schools and beneficial effects of podcasts on listening comprehension have been underexplored by applied linguistics researchers in Uzbekistan. To address those issues, this research examines the impact of podcasts on enhancing listening skills among intermediate-level language learners and its findings contribute to the ongoing discourse on innovative approaches to language education.

LITERATURE REVIEW

The use of educational podcasts to improve foreign language learners' listening skills has attracted much attention in several previous studies done by foreign researchers. Podcasting, which was initially created for entertainment by Adam Curry and Dave Winer at the end of the 20th century (Bottomley, 2015:3), started to be implemented into education as lectures in North Carolina, USA. Etymologically, the word consists of "pod" derived from iPod and "casting" as from broadcasting (Sičová, 2022:5). More than 850,000 podcasts are available on the internet (Winn, 2020:6) as for January 2020 and approximately 115,000 of them are English-teaching podcasts. In his publication called *Using social media in the classroom*, Poore recognizes podcasts as an effective teaching tool that educators can take as an advantage along with blogs, wikis and social networking. (Poore, 2015:34). According to Dale, there are 3 types of podcasts that can be employed by educators: 1) archives of lectures; 2) pre-recorded educational podcasts created by others; 3) podcasts produced by students. (Dale, 2007:12). Additionally, there are numerous podcasts specifically designed for ESL and EFL learners (Stanley, 2006:7). The potential of podcasts to enhance foreign language acquisition, specifically listening skills, has been investigated by several researchers in recent years. In their notable study, Faramarzi et.al. examined the effectiveness of vodcasts (podcasts with video content) in improving EFL learners' listening comprehension in a pre-test/post-test research design. They worked with 120 college-level learners providing them with 20 vodcasts belonging to different genres over a period of 12 weeks. The findings indicated a significant increase in learners' listening comprehension scores at the end of the treatment (Faramarzi et.al.,2019). Similarly, Ukrainian researchers Naidionova and Ponomarenko tried to study the impact of podcasts on developing listening skills and their final results proved their hypothesis regarding the positive effect of this type of audio materials on listening comprehension to be true (Naidionova & Ponomarenko, 2018). Another listening study conducted by Alm explored the role of podcasting in foreign language teaching: 28 German-learning students were exposed to German podcasts as well as wrote reflective blogs on their

podcast listening processes during one semester. The results demonstrated that students improved their listening skills with the help of authentic German input and freely selecting the theme of the podcasts brought students enjoyment in their language journey (Alm, 2013). From the most recent works, in her diploma thesis called *Using podcasts to develop students' listening comprehension skills*, Sičová detected an improvement in both listening skills and listening strategies of the B1 level language learners after her treatment which lasted 7 weeks and included 8 podcasts and self-assessment sheets (Sičová, 2022:97). Different aspects of podcasting as a powerful teaching tool were highlighted in the studies, theories and methodologies of various researchers: Yoestra and Putri investigated the influence of podcast exposure on the level of language learners' confidence (Yoestra & Putri, 2019); Alfian and Lio analyzed the potential of podcasting to boost motivation of the foreign language students. Due to their flexibility and convenience, podcasts enable learners to take control of their learning process and it keeps them engaged and motivated (Alfian & Lio, 2019). Hasan and Hoon carried out a meta-analysis of 20 scientific articles devoted to language learning podcasts and their findings suggested that podcasts are efficient media tool for achieving high-level listening proficiency (Hasan & Hoon, 2013). Dale (2007) concluded in his research study that podcasts should be used to enhance the interaction between teachers and students rather than being used as an alternative tool for this type of collaboration.

METHODS

Participants

Participants in this study were 30 second-year students of the Department of Integrated Course of English#3 of the Uzbekistan State World Languages University. They were selected from 2 existing groups: 22/02 and 22/30. The group 22-30 was taken as a control group while the group 22-02 was chosen as an experimental group. There were 15 students in the control and 15 in the experimental group. All of them met the selecting criteria of the research since all of them have obtained B2 level of English language proficiency. The research was conducted over a period of 4 weeks.

Instruments

The study utilized a comprehensive assessment protocol consisting of pre-tests, weekly podcast-based assessments, and post-tests to evaluate the impact of podcasts on the improvement of listening skills of intermediate level EFL students. Over a period of four weeks, participants were exposed to a series of eight podcasts as part of the experimental treatment. Weekly assessments were administered every Tuesday to gauge the comprehension and retention of the podcast content among participants.

Procedures

The study followed a structured procedure to investigate the effectiveness of podcasts in enhancing EFL learners' listening skills:

1. Pre-test Administration: Prior to the intervention, all participants completed a pre-test comprising 35 items, including matching, true/false, and multiple-choice questions, aimed at assessing baseline proficiency in listening comprehension and vocabulary.

2. Intervention Implementation: Over the course of four weeks, participants in the experimental group were assigned two podcasts per week to listen to repetitively. Each week, following podcast exposure, participants completed a test consisting of 15 items based on the content of the assigned podcasts. These assessments incorporated various question types, including matching, true/false, and multiple-choice questions, to evaluate comprehension and retention of the podcast material.

3. Control Group Procedures: Participants in the control group did not receive the podcast intervention but engaged in regular classroom activities during the intervention period.

4. Post-test Administration: At the conclusion of the intervention, both control and experimental groups underwent a post-test comprising 35 items, including matching, true/false, fill-in-the-gaps, and multiple-choice questions, mirroring the format of the pre-test. The post-test aimed to assess the overall impact of the podcast-based instruction on participants' listening comprehension skills and vocabulary acquisition, comparing outcomes between the control and experimental groups.

Scoring

Scoring for the assessments employed a binary system, with participants receiving a score of 1 for each correct answer and 0 for each incorrect response.

Data Analysis

Quantitative analysis of pre-test, post-test, and weekly assessment scores was conducted to examine the effectiveness of podcast-based instruction in EFL learning outcomes. Statistical analysis of pre-test and post-test results which were employed to compare performance between the control and experimental groups and assess the significance of any observed differences was conducted using a software program for statistical analysis called JASP.

RESULTS

The data from listening tests (pre-test and post-test) was analyzed using the JASP software program. Table 1 and Table 2 show the results of statistical analysis from pre-test:

Group Descriptives

Group	N	Mean	SD	SE	Coefficient of variation
pre-test comparison	15	18.800	2.366	0.611	0.126
treatment	15	20.467	2.774	0.716	0.136

Table 1. Group descriptive statistics (pre-test)

As we can see from Table 1, the mean score for the control group's listening pre-test was 18.800, while the experimental group's mean was 20.647, indicating no significant difference between the two groups in regard to listening proficiency.

Independent Samples T-Test

	t	df	p
pre-test	-1.770	28	0.088

Note. Student's t-test.

Table 2. Independent Samples t-test (pre-test)

Additionally, p-value obtained from analyzing pre-test using independent samples t-test also indicates that the means are homogeneous since it is greater than a predetermined threshold ($0.088 > 0.05$). Therefore, it can be claimed that the participants in both groups were similar in their listening comprehension at the start of the experiment.

After the treatment, the post-test was taken from both groups. Table 3 illustrates the difference in the mean scores of both control and experimental group:

Group Descriptives						
	Group	N	Mean	SD	SE	Coefficient of variation
L2 Listening	Comparison	15	20.200	4.212	1.088	0.209
	Treatment	15	29.000	2.000	0.516	0.069

Table 3. Group descriptive statistics (post-test)

From Table 3, it is evident that there is a significant difference between the mean scores of the control group ($M=20.200$) and the experimental group ($M=29.000$). It can be claimed by the results of the independent samples t-test that are given in Table 4:

Independent Samples T-Test			
	t	df	p
L2 Listening	-7.309	20.007	<.001

Note. Student's t-test.

Table 4. Independent Samples t-test (post-test)

The independent samples t-test revealed a significant difference between the results of post-test since the p-value which is $<.001$ according to the table 4 is less than 0.05.

In order to measure the strength of the relationship between the variables (podcast exposure and listening skills of the language learners), effect size was also measured:

Independent Samples T-Test						
	t	df	p	Cohen's d	SE	Cohen's d
L2 Listening	-7.309	20.007	<.001	-2.669		0.609

Note. Student's t-test.

Table 5. Effect size (Cohen's d)

The data in the table illustrates a Cohen's d of -2,699 indicating a large effect size.

DISCUSSION

The results from Table 1 demonstrate that at the outset of the experiment, there was no significant difference between the control group's mean listening pre-test score ($M = 18.800$) and that of the experimental group ($M = 20.647$), as evidenced by a p -value of 0.088 from the independent samples t -test. This suggests that participants in both groups had similar listening comprehension abilities prior to the intervention.

Moving to Table 3, a notable contrast emerges between the mean scores of the control group ($M = 20.200$) and the experimental group ($M = 29.000$) post-intervention. The independent samples t -test results in Table 4 affirm this difference as statistically significant ($p < .001$), indicating that the experimental intervention had a substantial impact on improving listening proficiency compared to the control condition.

Moreover, the effect size, reflected by a Cohen's d of -2.699, underscores the magnitude of this difference, pointing to a large effect attributable to the intervention.

These findings suggest that the experimental intervention led to significant improvements in listening comprehension skills among participants, highlighting the effectiveness of the intervention in enhancing language learning outcomes.

CONCLUSION

In conclusion, the results of this study provide compelling evidence regarding the effectiveness of utilizing podcasts as an intervention for enhancing listening skills among intermediate level students. Initially, there was no significant disparity in listening proficiency between the control and experimental groups, indicating comparability in abilities prior to the intervention. However, following exposure to podcasts, the experimental group exhibited a remarkable improvement in listening comprehension, as evidenced by significantly higher post-test scores compared to the control group.

The statistical analyses, including the independent samples t -test and the calculation of effect size, consistently demonstrated the substantial impact of the podcast intervention. The large effect size (Cohen's $d = -2.699$) further underscores the magnitude of the observed improvement, affirming the potency of podcasts in fostering language learning outcomes.

Overall, the results support the efficacy of integrating podcasts as a supplementary instructional tool in EFL pedagogy, highlighting its potential for enhancing listening skills and fostering autonomous learning. Therefore, in response to the research question, "Is there any significant difference in the intermediate level students' listening skills development between the experimental group exposed to podcasts and the control group?" the findings

unequivocally support the hypothesis that exposure to podcasts leads to significant enhancements in listening skills development among intermediate level students. These results not only contribute to the existing literature on language learning methodologies but also offer practical implications for educators seeking innovative approaches to optimize language learning experiences.

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*Abduraxmanova A.E.
Chirchiq davlat pedagogika universiteti talabasi*

MUXTOR AUEZOV VA DIN MUAMMOSI

Annotatsiya. Buyuk adib, olim, jamoat arbobi M.Auezovning badiiy merosi nafaqat asl adabiyotimiz, balki butun insoniyat madaniyatining yutug'idir. Uning ijodiy faoliyati keng va boy. Romanchi, dramaturg, olim, ssenariynavis, tarjimon - bu buyuk yozuvchi iste'dodining to'liq bo'lmagan ro'yxati. Muxtor Auezov – o'zining qomusiy bilimi va buyuk iste'dodi bilan ma'naviy hayotning ko'plab sohalarida porladi va butun qozoq madaniyatiga ta'sir ko'rsatdi.

Kalit so'zlar: zabardast allomalar, ta'limi sohasi, buyuk iste'dod, munosib davomchisi, tafakkuri, muloqot qobiliyati, iymon-e'tiqodni.

*Abdurakhmanova A.E.
student
Chirchik State Pedagogical University*

MUKHTAR AUEZOV AND THE PROBLEM OF RELIGION

Abstract. The artistic legacy of the great writer, scientist, public figure M. Auezov is not only the original literature, but also the achievement of the entire human culture. His creative activity is wide and rich. Novelist, playwright, scientist, screenwriter, translator - this is an incomplete list of the great writer's talent. Mukhtar Auezov - with his encyclopedic knowledge and great talent, shone in many areas of spiritual life and influenced the entire Kazakh culture.

Key words: outstanding scholars, field of education, great talent, worthy successor, thinking, communication skills, faith.

Har bir xalqning ma'naviy hayotida “yuzdan – chopar, mingdan – ot chiqaradigan” asriy shaxslar, betakror iste'dod sohiblari, zabardast allomalar, “Mehr-shafqatini qon to'kkan” daholar bo'lishi shubhasiz. odamlar (A. Baytursinov). Ularning hayotiy taqdiri, ibrat namunasi, qadr-qimmatini bir-biriga nur sohib, bir-birini o'rinbosar, avvalgi xayrli ishlarini davom ettirib, to'ldiradigandek tuyuladi. Bunday asr farzandlari – xalqimizning buyuk iste'dod sohiblari har bir davrda yashab, o'z insoniy burchini a'lo darajada bajargan. Agar 19-asrda mamlakat tarixida Ibyray Oltinsarin xalq ta'limi sohasida, Abay Kunanboyev milliy ma'naviyatda alohida o'rin tutgan bo'lsa, 20-asrda, ayniqsa, ta'lim-tarbiya sohasida Axmet Baytursinovning beqiyos asarlari va xalq ta'limoti, xalq ta'limi, xalq ta'limi, xalq ta'limi, Abay Kunanboyev alohida o'rin tutgan. Muxtor Auezov adabiy-madaniy hayotda ana shunday fikrlarni keltirib chiqaradi. Xalq tarixiga sekin nazar tashlasangiz, har bir davrdan bunday misollarni uchratish qiyin emas. Ma'lumki, biz so'z yuritmoqchi bo'lgan buyuk iste'dod

sohibi M.Auezov bu uch devning hayotiy maqsadlariga alohida e'tibor qaratgan. Binobarin, Muxonning g'oyat serhosil ijodiy merosi o'tmishdagi buyuk donishmandlarning qonuniy davomi, ular bilan chambarchas bog'liq bo'lgan ibratli jarayon, deyish mumkin. Shunday qilib, u o'zidan oldingi sherlar qila olmagan ezgu ishlarni amalga oshirdi, "Abay yo'li" roman-epopeyasi orqali o'z ona xalqining ma'naviy salohiyatini butun dunyoga ko'rsatib, qozoq xalqini butun dunyoga ko'rsatdi. uzoq tor yo'llar va sirpanchiq yo'llar davrida ham er yuzida yashash.

Universitetdagi ustozi haqida: "Agar qozoq xalqining ma'naviyat tarixida Abaydan keyin o'zgacha farzand bo'lgan bo'lsa, bu Muxtor Auezovdir. Bu orada Abay og'zimizda yo'q. Auezov iste'dodining ma'naviy rivojlanishi Abay ijodidan boshlanadi. Abayning adabiyotimizdagi yagona munosib davomchisi esa Auezovdir", - deydi yozuvchi Abish Kekilboyev ("Qozoq adabiyoti", 1987 yil 25 sentyabr). Bu yil buyuk adib tavalludining 115 yilligi nishonlanadi. Bugungi kunga qadar adib ijodi tadqiqotchilar tomonidan turli tomonlardan ko'rib chiqiladi. Ammo din mavzusi adib ijodining hozirgacha ko'p tadqiqotchilar e'tiboridan chetda qolayotgan, ba'zilar e'tiborga ham ololmaydigan o'ta mazmunli jihati va o'ta sermahsul kanali desak, yanglishmagan bo'lamiz.

Har qanday davrda dinga ijtimoiy ongning muhim shakli, umuminsoniy sivilizatsiyaning tarkibiy qismi va chuqur ildizlarga ega ma'naviy ne'matlar sifatida qaraladi. Shuning uchun u har bir mamlakat, har bir xalqning kundalik hayotida muhim o'rin tutadi. Zero, din orqali insoniyat qadim zamonlardan buyon atrof-muhitni bilish, uni ma'naviy jihatdan o'zlashtirish yo'llarini ko'rib keladi. Iste'dodli rassom buni butun qalbi bilan his qildi. Demak, adibning boshqa asarlari va tadqiqot ishlarini bir chetga surib qo'yadigan bo'lsak, faqat "Abay yo'li" roman-epopeyasigina fikrimizni isbotlay oladi. Sababi, Abayning betakror taqdiri – tabiati, xulq-atvori, tafakkuri, bilimi, dahosi uning butun borlig'ini ochib berish, shu orqali qozoq adibi Abaydayning urf-odatlarini, urf-odatlarini, turmush tarzini tasvirlashi kabi olim, mutafakkir bo'lishni taqozo etadi. Abay, diniy jihatdan Abay kabi malakali. Muxan esa o'zida ana shunday xislatlar, muloqot qobiliyati borligini ko'rsata oldi. U daho Abayning nafaqat she'riy san'atini, balki uning ilmiy tafakkuri, diniy bilimi, yuksak dunyoqarashi, jahon miqyosidagi ezgu maqsadlarini ham zamonning voqea-hodisalari, davr holatlari orqali keng nafas bilan taqdim eta oldi.

"Burgut uyada nimani ko'rsa, uchganda uni oladi", deydi xalq hikmati. Buni Muxonning o'sish yo'lidan, voyaga yetganlik hikoyasidan yaqqol ko'rishimiz mumkin. Zero, u ta'lim olgan maktab adib chiqqan muhit – Auez Xo'ja oilasi, bilim va bilim olgan Kunanboy hoji ibratini ko'rgan donishmand Abay muhiti, ilg'or Sharq mumtoz adabiyoti mutafakkirlari, rus va Yevropa ma'naviyati namoyandalari boy adabiy-madaniy merosga ega edilar. Bo'lajak adibning diniy qarashlari, ma'naviy fikrlari bolalikdan shakllana boshlagan. Yozuvchining amakivachchasi Razzoq u haqida shunday deydi: "Men Muxtordan o'n ikki yosh kattaman. U 1897 yilda Burli yaqinidagi Akakaranga shahrida norka

mo'ynasini olayotganda tug'ilgan. Bola sutdan ajratilgach, Auez bobo va Dinasil buvilar qorniga kirib, to'liq ulg'aygan. Ko'mirdek qora sochlarini, qora to'rini, yoqimtoy nabirasini chin yurakdan sevardilar. Uni doimo erkalab, tarbiyalagan. Olti yoshida bobosi unga arabcha xat ko'rsatdi. Uning o'ychanligiga misol: Bir guruh bolalar bobomizdan arab tilini o'rganganlarida, iymon-e'tiqodni yod olib, shukr qilishgan edi....Bobosidan qolishmagan Muxtor Abay ham duo oldi.

Ulug' shoir vafot etgach, uning qabrida Qur'on tilovat qilgan bobomiz Auezxo'ja edi. Shunda Muxtor bobosi bilan g'amgin yurt o'rtasida ketgan qarg'aga o'xshab qabrga tuproq solibdi. Bunday axloqiy tarbiya samaralarini uning kattalar ijodida, adabiy asarlarida yaqqol ko'rishimiz mumkin. Yozuvchining g'oyaviy-siyosiy, tarixiy-kognitiv tahlil yoki ilmiy izlanish maqolalarida bo'lsin, diniy mavzu haqida gapirish erkinligining yakuniy siri ham shunda bo'lsa kerak.

Binobarin, M.Auezovning "Abay yo'li" roman-epopeyasidagi barcha gumanistik g'oyalarning ildizi, strategik va konseptual asoslarini uning diniy qarashlari, diniy tamoyillaridan izlagan ma'qul. Zero, barchamizga ma'lumki, barcha jahon fundamental dinlari ezgu fikr, yuksak axloqiy fazilatlar, insonparvarlik qadriyatlarini targ'ib qiladi.

Asardagi ezgulik, insonparvarlik maqsadlari nuri esa uni tasvirlashda personajlarning axloqiy qarashlari va muallifning ma'naviy-axloqiy pozitsiyasini farqlash jarayonida namoyon bo'lishi kerak. Aytilganidek, axloq muammosi "Abay yo'li" roman-epopeyasining asosiy g'oyaviy kanalidir. Ma'lumki, bu, avvalo, "islom chashmasidan suv ichgan, turkiylik bilan tarbiyalangan" (J. Aymautov). Shu o'rinda atoqli adib Taken Alimqulovning M.Auezovning islomiy bilimi, umuman, chuqur diniy bilimlari haqidagi quyidagi xotirasini e'tiborga olish o'rinlidir: "Men buni o'zim ko'rmadim. I.B.dan eshitdim. SSSR Yozuvchilar uyushmasi qabulxonasida Muxtor Auezov allaqachon Nozim Hikmet bilan din haqida bahslashgan edi. "Muxtor Nozimning og'zini ochmadi. Muxtorlar musulmonga tez, deb kim o'ylabdi?! - deydi I.B. hayron. Taken Alimqulov o'sha yillarda Moskvada SSSR Yozuvchilar uyushmasida adabiy maslahatchi bo'lib ishlagan. Darhaqiqat, Turkiyada tug'ilib, musulmon ta'limini olgan, sovet qizil mafkurasi ta'sirida ulg'aygan Muxtor Auezovning dunyoga mashhur turk adibi Nozim Hikmatning og'zini ochmagani mo'jizadir.

"Abay yo'li" romanidan mohir adibning din-islom ta'limotiga bo'lgan chaqqonligi, buyuk bilimdonligini adibga cheksiz minnatdorchilik bilan kuzatishimiz mumkin. Rassom asardagi har bir fikr va mulohazalarini o'z qahramonlarining so'zlari yoki muallif matnlari bilan tasdiqlaydi. Bu buyuk adibning buyuk ijodkorga yuksak ma'naviy e'tiqodi, diniy bilimi, islom ilmidagi tele-gey-dengiz savodxonligini ko'rsatadi.

Xalqimizning chinakam shoiri Abdilda Tojiboyevning quyidagi hikoyasi Muxonning shaxs sifatidagi diniy qarashlari va e'tiqodlarini ochib bergandek bo'ladi:

“...Aymanquldi, M.Auezov onamni “Ayeke” der edi. Bir kuni Muxon uyimizga keldi. Rangi buzilgan.

Sheshem buni ko'rib, Muxaga dedi.

-Muxtor, qara, qoshlaring to'g'ri kelmaydi, bilaman, birovdan xafa bo'lganga o'xshaysan? - u aytdi. Shunda Muxon ma'yus, qovog'ini burishtirgan ifodasini o'zgartirmadi:

- Hoy, nima so'rayapsiz? Ular taniqli joylar, dedi u.

Shunda Aymanqul:

— Balki, Xudo uyning tomini xalqi buzsa, qutulolmas, — dedi.

Muxon o'sha yerda silkinib, xursand bo'lib ketdi.

“Yaxshi so'z – yarim yolg'on” parchasidan atoqli she'riyat shoiri, atoqli Aytis shoirning suyukli onasi qudratli Yaratganga: “Xudoning uyning tomini uydan olib tashlashga qodir bo'lmasa kerak. uy.” qilganini ko'rish mumkin.

Romandagi asosiy fikr kanali, insonparvarlik namunalari va axloqi buyuk Abayning

“Qur'on ezgu amallarga to'la” degan fikridan kelib chiqqandek.

Buni asardagi quyidagi tematik kanallar orqali, ularga aql nigohi bilan e'tibor qaratgan holda ko'rish mumkin:

“Abay yo'li” roman-epopeyasida ta'lim-tarbiya bilan bog'liq islomiy munosabatlar;

Asardagi dindorlar obrazi;

Roman dostonidagi diniy tushunchalar, e'tiqodlar, diniy marosimlar;

Asarda dinga oid maqollar, iboralar, atamalar, frazeologik birliklar.

Bu mavzularning har biri asarga yangicha nuqtai nazardan baho berish, ma'naviy qadriyatlarimizni bugungi davr talablari asosida qadrlash va e'zozlash, insonparvarlik fikrlarini shakllantirish va rivojlantirishga xizmat qiladi.

M.Auezov: “Abay Sharqdan olgan qadriyatlarning boshlanishi islom dinidir....Abay aniq diniy shoirdir. Din-islom yo'li asoslariga sig'inib, doimo Alloh, Payg'ambarimiz, Islom iymon-e'tiqodi haqida gapirganligi din ustozining tushuncha va e'tiqodini ko'rsatadi. Har bir dindor musulmonning og'zida, tilida ham, she'riy lug'atda ham duo va sajda so'zlari bor, deb bejiz aytmagan. Buni roman-epopeyaning uzunligi, mazmuni, g'oyaviy-badiiy xarakteridan bilish qiyin emas. Endi romandagi tarbiya masalasiga e'tibor qaratsak. “Qiyoda” bobida: “Abay kechki payt Zeredan chiqqach, buvisining to'shagiga o'tirib, Qur'onni tarjima qila boshladi. Onasining ruhiga bag'ishlagan “Qur'on-xatmi”sini mullaga o'rgatmay, o'qib berardi. Bir juma kuni bir Qur'onning ikki tarjimasi chop etildi. Shu kunlarda Kunanboy kechki ovqat paytida Abayga dedi: — Tarjima qilyapsan, — dedi, Abay javob bermadi. Kunanboy shunday holatda uch-to'rttasini taqillatib yuboradigan mullalarni esladi. Abay ichki sababni aytmadi. U tez o'qiydigan ham edi.

Abay Qur'onni o'zgacha qiziqish bilan, shoshmasdan, singlisining savobini olishini shunday jimgina, duo qilib o'qiydi. U uzoq vaqt Qur'onning qaysidir qismida o'tiradi va yolg'iz, yashirin fikrlarni o'ylaydi. Bu buvisining insoniy va

onalik fazilatlariga motam tutish edi. O'zining samimiy minnatdorchiligini bag'ishlash ham ibodatli tilak sifatida ko'rilishi mumkin ", deydi u. Bu parchadan Abayning chinakam ma'naviy e'tiqodi kuchli, diniy bilimi chuqur ekanligini ko'rish mumkin. Bu yerda uning Qur'on qiroatidan, ayniqsa, "Kalom-sharip"dan (Muqaddas kalom yoki Allohning kalomi) mullaga, Islom shariatiga ko'ra yozishidan, avlodlari va yaqinlari. vafot etgan kishi, "Alloh rozi bo'lsin", "Yolg'onchilik Biz bilamizki, u o'z yurtini obod qilish niyatidadir", "Iymon keltirgin", "Allohning nuri va shifoati bilan bo'lsin. Payg'ambarimiz". Ulug' san'atkor Islom dinida marhumning ruhiga maktub-Qur'on tilovat qilib, duo o'qisang, marhumga ham Alloh taolo ulug' ajr yozib qo'yishini e'tiborga olganini anglashimiz mumkin. o'qib, ibodat qildilar.

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*Abdusalomova R.A.
2nd stage student
The direction of preschool education
Termiz State Pedagogical Institute
Quvvatova M.H.
teacher
Termiz State Pedagogical Institute*

DEVELOPMENT OF INTELLECTUAL ABILITIES OF PRESCHOOL CHILDREN BASED ON A PERSON-ORIENTED APPROACH

Annotation. In this article, we can learn how to develop intellectual abilities in person-centered learning in preschool children, and what to look for when teaching learners in a person-centered learning process.

Keywords: person-centered, intellectual, emotional, environment, ethical, educator, foster.

The intellectual development of preschool children is very important, because it creates skills for successfully mastering educational activities. The collection of information of preschool age takes place at a rapid pace, knowledge processes are being improved, and speech is being formed. Schoolchildren with developed intelligence quickly learn and memorize new materials, are more confident in their abilities, and have a greater desire to learn, as shown in practice.

Children's didactic games play a special role in the development of the intellectual abilities of preschoolers, which are a means of teaching and help children to acquire and consolidate knowledge, as well as to learn methods of knowledge activity. Schoolchildren learn to classify, compare and generalize thanks to the didactic game, which increases children's interest in educational activities.

Mental development of young children should help not only to acquire and consolidate knowledge, but also to activate the thinking activity of preschool children.

Education of preschool children on the basis of person-oriented education is manifested in the following: - the content, environment, style of interaction in the process of preschool education, assimilation of all human qualities, awareness of oneself as a person, respect it should help to educate the feeling of doing. - the pedagogical process should help to feel the feelings of others, to follow moral standards, and also to understand the social importance of education. - the pedagogical process should educate such qualities as creativity, intelligence, independence and social activity in the students. In this regard, it is important to model the pedagogical process taking into account the unique characteristics of the students

In this case, it is appropriate to choose teaching technologies taking into account the maturity of the students and their "I". It is also necessary to comply with the following conditions: It is important for children in preschool education to have a sense of free choice. This does not mean that they can do whatever they want, on the contrary, it is necessary to organize educational activities in the educational process on the basis of democratic principles, to achieve the personal significance of educational materials for them, to have a desire for conscious learning of knowledge. need to wake up. It is important not to deliver knowledge to learners ready-made, but to encourage them to think, draw conclusions, and freely express their personal views by involving them in various activities. will come. Pedagogical process should lead to the awakening of certain emotions in the student. After all, the purpose of education is not limited to providing students with scientific knowledge, forming practical skills and competencies, but also to develop the feelings of each student, to understand their inner experiences, to evaluate their desires and needs. develops acquisition skills.

Such a process is of special importance in the development of the student as a person. L.V. Zan'kov, V.V. Davidov, A.N. Leontev confirm this idea. The result of upbringing in relation to education is not immediately apparent. In some cases, the negative effects have the opposite effect on the positive qualities of the student. So, the educational process has a changing nature and it is considered long-term.

Education has a two-way nature, it is from the student ↔ to the teacher; it is directed from the teacher ↔ to the student. A technological approach to education helps to fully satisfy this demand. In modern conditions, the concept of "technology" is gaining a new meaning in the theory and practice of pedagogy.

Summarizing the definitions of U.N.Nishonaliev, B.L.Farberman, V.P.Bespalko, M.Ochilov, N.N.Azizkhodzhaeva, N.Saidahmedov, M.V.Klarin, V.A.Slastenin, S.K.Ismagulova, O'.Tolipov, and others, pedagogical technology is "a technology that can guarantee the success of pedagogical activity and We agree with the definition "process project aimed at forming the personality of the student" from the point of view of the problem.

An exercise aimed at developing children's intellectual abilities Draw a story or a story through pictures. The child is shown 4 pictures, which depict fairy tales or events known to him. The task of the child is to arrange the pictures in the correct sequence and create a small story with the help of illustration. 2. Recognition of objects for a number of reasons. The child is called an epithet, it is necessary to determine what topic you are talking about. For example, yellow, sour, oval (lemon). Comparing two or more things. The child is invited to say what the words are similar to. For example, a cat, a book, a roof. You can tell the child how to name a cat and a dog, a table and a chair. Next, you need to find the differences in the objects: a pencil and a pen, a tree and a bush. 4. Choosing a suitable pair that logically connects the topic.

For example, an arrow - a clock, a wheel -? (an axle is part of a clock, so the correct answer is about a car, because a wheel is part of a car). Sincina gap, the bear is exactly the hunter, the fisherman in the forest trees, in the field? In person-oriented education on the basis of modern educational technologies, attention is paid to the following situations: - influencing the consciousness, feelings, and behavior of the student; - self-realization of the student based on external influences education; - interaction of all areas related to personality education; - achieving harmony of intellectual, moral, aesthetic and other components of education in personality formation; - systematicity of the personality formation process; - determining the education level of the student.

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Achilova Z.P.
Roman-german filologiyasi fakulteti katta o'qituvchisi
O'zDJTU

ISPAN VA O'ZBEK TILLARIDA "EDAD" TUSHUNCHASI BILAN BOG'LIQ BO'LGAN KO'CHMA MA'NOLARNI IDROK ETISHNING MILLIY O'ZIGA XOS XUSUSIYATLARI

Mazkur ilmiy maqola ispan va o'zbek tillarda "Edad" tushunchasi bilan bog'liq bo'lgan ko'chma ma'nolarni o'rganishga bag'ishlanadi. Unda turlicha tizimdagi tillarda "Edad" so'zi bilan mavjud bo'lgan barqaror iboralar qo'llanilishining o'xshash va farqli stilistik xususiyatlari aniqlanadi, shuningdek ikki halq muqobil barqaror birikmalarining leksik, semantik xususiyatlari tahlil qilinadi. Tadqiqot ispan tilidagi "Edad" konseptini nominatsiyalarining semantik jixatlarini tarkibiy qismlarini aniqlashga, ular o'rtasidagi tizimli munosabatlarni o'rganishga, shuningdek, ispan va o'zbek tilida so'zlashuvchilar tomonidan inson yoshi davrlarini idrok etish bilan birga keladigan lingvistik ongning stereotiplarini aniqlashga qaratilgan.

Tayanch so'zlar: yosh, ko'chma ma'nolar, to'plam iboralari, ispan va o'zbek tillaridagi leksik-semantik xususiyatlar, yosh davrlari, lingvistik ong, stereotiplar.

Achilova Z.P.
teacher
Faculty of Romano-Germanic Philology
UzSWLU

NATIONAL PECULIARITIES OF PERCEPTION OF FIGURATIVE MEANINGS RELATED TO THE CONCEPT OF "EDAD" IN SPANISH AND UZBEK LANGUAGES

This scientific article is devoted to the study of figurative meanings related to the concept of "Edad" in Spanish and Uzbek languages. It identifies the similar and different stylistic features of the use of stable expressions with the word "Edad" in languages of different systems, as well as analyzes the lexical and semantic features of alternative stable combinations of the two languages. The research aims to determine the components of the semantic aspects of the nominations of the concept of "Edad" in Spanish, to study the structural relations between them, as well as to determine the stereotypes of the linguistic consciousness that accompany the perception of human age periods by Spanish and Uzbek speakers.

Key words: edad - age, figurative meanings, stable expressions, lexical and semantic features, in Spanish and Uzbek, age periods, linguistic consciousness, stereotypes.

Kirish. Mazkur ilmiy maqola ispan va o‘zbek tillarda “Edad” tushunchasi bilan bog‘liq bo‘lgan ko‘chma ma’nomlarni o‘rganishga bag‘ishlanadi. Unda turlicha tizimdagi tillarda “Edad” so‘zi bilan mavjud bo‘lgan barqaror iboralar qo‘llanilishining o‘xshash va farqli stilistik xususiyatlari aniqlanadi, shuningdek ikki halq muqobil barqaror birikmalarining leksik, semantik xususiyatlari tahlil qilinadi. Tadqiqot ispan tilidagi “Edad” konseptini nominatsiyalarining semantik jixatlarini tarkibiy qismlarini aniqlashga, ular o‘rtasidagi tizimli munosabatlarni o‘rganishga, shuningdek, ispan va o‘zbek tilida so‘zlashuvchilar tomonidan inson yoshi davrlarini idrok etish bilan birga keladigan lingvistik ongning stereotiplarini aniqlashga qaratilgan.

“Edad” konsepti inson mavjud bo‘lgan lingvomadaniy muhitning eng muhim elementlaridan biridir. Yosh - jismoniy, psixologik va xulq-atvor rivojlanishining sifat jihatidan o‘ziga xos davri bo‘lib, unga xos xususiyatlar bilan tavsiflanadi. Shaxsning yoshi kognitiv jarayonlarda, uning idrokida, xotirasida, tafakkurida, nutqida, shaxsiyat xususiyatlarida, qiziqishlarida, mulohazalari, qarashlari, xulq-atvor motivlarida namoyon bo‘ladi. Yosh tushunchasi bolalarning intellektual va shaxsiy rivojlanishida yosh normalarini o‘rnatish uchun asos bo‘lib xizmat qiladi.

“Edad” konseptining sanab o‘tilgan ma’nomlari bizga ispan tilida bo‘lgani kabi, o‘zbek tilida xam "yosh" tushunchasi vaqt va rivojlanish tushunchalari bilan uzviy bog‘liq degan xulosaga kelishimizga imkon beradi. O‘zbek tilida “yosh” leksemasi birovning yoki biror narsaning rivojlanishi, o‘sishi, ulg‘ayish davri, yashash vaqti, yillari, yer tarixidagi davrlar, asr, yil, oy, soat, soniya va dakikalar ma’nomlarini ham bildiradi. Biroq, ispan va o‘zbek tillarining leksikografik manbalari ma’lumotlarini taqqoslash “Edad” konseptini yosh leksemalarining talqinida ba’zi nomuvofiqliklar mavjudligini aniqlashga imkon berdi.

Konsept zamonaviy tilshunoslikning yadrosi sifatida takomillashib borayotgan tadqiqot sohasidir. U bevosita inson ongi, idroki bilan bog‘liq bo‘lgan jarayon bo‘lib, oliy tafakkur mahsuli sifatida namoyon bo‘ladi. Bu tushunchaga juda ko‘plab olimlar o‘zlarining ta’riflarini berishgan. Birmuncha yangi hisoblangan bu yo‘nalish bo‘yicha o‘zbek tilshunosligida ham tadqiqot ishlari ko‘lami ortmoqda. Shu o‘rinda Sh. Safarov, N.Mahmudov, T. Mardiyev, E.Mamatov, M. Rahmatova, O‘.Yusupov, G. Hoshimov kabi olimlarning tadqiqotlarini alohida ta’kidlash joiz.

Bundan tashqari T.Mardiyev “Do‘st/friend”, “baxtsizlik”, “mehr-muhabbat”, “yurak” konseptlari bo‘yicha ham ilmiy izlanishlar olib borib, tadqiqotlari jarayonida o‘zbek va ingliz tili materiallarini o‘zaro solishtirgan holatda lingvomadaniy ko‘rinishda leksik-semantik, etnik jihatdan tahlil qilib bergan. Xuddi shu yo‘nalishda M.M.Rahmatovanning ham filologiya fanlari bo‘yicha falsafa doktori (PhD) dissertatsiya mavzusi “Ingliz, o‘zbek va tojik milliy madaniyatida “Go‘zallik” konseptining lisoniy xususiyatlari” deb nomlanib, olim bu tadqiqot ishida ingliz, o‘zbek va tojik tillari maqollarida aks etgan “go‘zallik konsepti doirasida go‘zallik prototip ma’nomlarining botiniy

go‘zallik, zohiriy go‘zallik, muhit, hodisa, predmet go‘zalliklari kabi aksiologik xususiyatlari asoslab berilgan.

Tilshunos olim O‘.Q. Yusupov konsept haqida fikr yuritir ekan, uni shunday ta‘riflaydi: konseptni “tashqi yoki ichki dunyodagi biror bir narsa yoki hodisa haqidagi ongimizdagi bilimlar majmuasi, u haqidagi obrazlar va unga bo‘lgan ijobiy, salbiy, neytral munosabatlar, ya’ni baholashlardir. Konsept bilan tushunchani aysbergga o‘xshatish mumkin. Agar konsept aysberg bo‘lsa, uning suvdan chiqib turgan qismi tushunchadir”[13, 49]. Bu fikrga ham qo‘shilish mumkin, chunki aysbergning suvdan chiqib turgan qismi uning suvostidagi qismiga nisbatan anchayin kichik. Demak, biror so‘zni konseptual tahlilga tortishda, dastlab, uning lisonida paydo bo‘lgan voqelanishi tushuncha deb qaraladigan bo‘lsa, chuqurroq kognitiv talqin qilinganda uning yanda ko‘proq mazmuni namoyon bo‘laveradi. Konsept so‘zni shunchaki anglatgan ma’nosiga qarab emas, uning borliqda ifodalanadigan barcha tushunchalarini, inson idroki bilan bog‘liq jihatlarni, lingvumadaniy ko‘rinishlarini kognitiv talqinda tahlil etadi.

Tilshunoslarning insonning til qobiliyatini modellashtirish masalalariga bo‘lgan e’tibori ortib borayotgan va xususan, lisoniy tasvirga ega bo‘lgan aqliy makon birliklari sifatida tushunchalarni modellashtirish bilan belgilanadi. Ishda ispan va o‘zbek tillarida “Edad” konseptni ifodalovchi ko‘p darajali birliklarning (leksik, frazeologik va semantik funksional) semantikasini tahlil qilib, ispan va o‘zbek tillarida “Edad” konseptiga xos bo‘lgan konseptual xususiyatlar aniqlanadi, ular asosida, o‘z navbatida, asosli shakil tuzilishi belgilab olinadi. Semantikani tahlil qilish va til birliklarini aktuallashtirish misollari ispan va o‘zbek madaniyatiga xos bo‘lgan yosh tushunchasini idrok etishning milliy o‘ziga xos xususiyatlarini aniqlashga imkon beradi. Til birliklarining semantikasini tahlil qilish, usulidan foydalanish ispan va o‘zbek madaniyatida shaxsning yoshga bog‘liq holatlarini konsepsiyalashning o‘ziga xos xususiyatlarini ko‘rsatadi.

Yuqoridagi tadqiqotlarning aksariyati tegishli tillarning leksikografik manbalaridan “Edad” konseptini uzluksiz tanlab olish yo‘li bilan tanlangan til birliklari materiallari bo‘yicha izlanishlar olib borgan. Leksemalarning semantikasini tahlil qilish asosida tadqiqotchilar “Edad” konseptining leksik-semantik sohasini qurdilar. Shu bilan birga, ba’zi tadqiqotchilar (masalan, Babarykina T.S. (2010)) ma’lum mualliflarning badiiy asarlari materialida asosida “Edad” konseptini so‘zlashuv xususiyatlarini o‘rgandilar. Ba’zi ishlarda (Kalyujnaya (2007), Kryuchkova (2003), Pintova (2009) va boshqalar) yosh tushunchasini o‘rganishni bir necha tillar materialida amalga oshiradi, bu ularning mualliflarning turli til jamoalari a’zolari tomonidan yosh holatlarini konsepsiyalashdagi farqlari va o‘xshashliklarni ko‘rsatishga imkon berdi.

Ushbu ilmiy izlanishlardan farq o‘laroq bizning ilmiy izlanishlarimiz “Edad” konseptining ispan va o‘zbek tillaridagi leksik-semantik xususiyatlarini o‘rganishga bag‘ishlanar ekan, ilmiy izlanishlarimiz davomida ikki til ispan va o‘zbek tillarida “Edad” konseptni ifodalovchi ko‘p darajali birliklarning (leksik, frazeologik va semantik funksional) semantikasini tahlil qilib, ispan va o‘zbek

tillarida “Edad” konseptiga xos bo‘lgan konseptual xususiyatlar aniqlanadi, ular asosida, o‘z navbatida, asosli shakil tuzilishi belgilab olinadi.

Tadqiqotda adekvat holatda o‘rganishni ta‘minlashga qaratilgan metodlar majmui: nazariy taxlil, chog‘ishtirma tahlil, leksik, stilistik taxlil qo‘llanildi. Mazkur ilmiy izlanish ispan va o‘zbek tillarda “Edad” so‘zi bilan bog‘liq bo‘lgan ko‘chma ma‘nolarni o‘rganishga bag‘ishlanadi. Unda turlicha tizimdagi tillarda “Edad” so‘zi bilan mavjud bo‘lgan barqaror iboralar qo‘llanilishining o‘xshash va farqli stilistik xususiyatlari aniqlanadi, shuningdek ikki halq muqobil barqaror birikmalarining semantik funksional xususiyatlari tahlil qilinadi.

Qolaversa, ishda chog‘ishtirilayotgan ispan va o‘zbek tillarda “Edad” konseptiga tushunchalarning paydo bo‘lishi, va o‘zgarishi jarayonlarida milliy qadriyatlar ta‘sirining so‘z yasalishidagi derivatsion jihati dalillab beriladi. Bundan tashqari, ushbu konseptning tilda voqelanishida har ikkala xalqning “Edad” konseptni ifodalovchi ko‘p darajali birliklarning (leksik, frazeologik va semantik funksional) semantikasini tahlil qilib, tushunchaga xos bo‘lgan konseptual xususiyatlar aniqlanadi, ular asosida, o‘z navbatida, asosli shakil tuzilishi belgilab olinadi. Semantikani tahlil qilish va til birliklarini aktuallashtirish misollari ispan madaniyatiga xos bo‘lgan “Edad” tushunchasini idrok etishning milliy o‘ziga xos xususiyatlarini aniqlashga imkon berdi, bu dunyoning ispan va o‘zbek tilidagi portretini chuqurroq o‘rganishga va aniqroq tassavur qilishga yordam beradi. Til birliklarining semantikasini tahlil qilish, usulidan foydalanish ispan va o‘zbek madaniyatida shaxsning yoshga bog‘liq holatlarini konsepsiyalashning o‘ziga xos xususiyatlarini ko‘rsatadigan jihatlari yoritib beriladi.

Semantikani tahlil qilish jarayonida va til birliklarini aktuallashtirish misollari ispan va o‘zbek madaniyatiga xos bo‘lgan “Edad” konseptini idrok etishning milliy o‘ziga xos xususiyatlarini aniqlashga e‘tibor qaratiladi. Til birliklarining semantikasini tahlil qilish, usulidan foydalanish jarayonida esa ispan va o‘zbek madaniyatida shaxsning yoshga bog‘liq holatlarini konsepsiyalashning o‘ziga xos xususiyatlarini o‘rganiladi.

Xullas, keyingi yillarda tilshunoslik sohasida paydo bo‘layotgan va shakllanayotgan yangi yo‘nalishlarning mavjudligi bu sohadagi modernizatsiyalanishning keskin sur‘atlarda ekanligidan dalolat beradi. Ana shunday yo‘nalishlardan biri bo‘lgan kognitiv tilshunoslikning asosiy tushunchalaridan biri bo‘lgan konsept atamasi, dastlab, rus tilshunosligida, so‘ngra jahonning boshqa tilshunoslik sohalariga kirib bordi. Aynan o‘zbek tilshunosligida 90- yillarga kelib shakllangan tushuncha bugungi kunda ham o‘z tadqiqotchilariga ega. Jahon tilshunosligiga nazar tashlasak, tilning konseptulan tabiatiga bo‘lgan talab va bu ko‘lamda qilingan ishlar, nazariyalar 80-yillarga kelib birmuncha tanqidlarga uchraydi. Yillar o‘tishi bilan esa tadqiqot maydoni kengayib konsept va konseptual sohaga talab va qiziqish qayta tiklandi.

“Edad” so‘zi lotincha *cevum* (abadiylik, doimiylik) so‘zidan kelib chiqan bo‘lib. *Tempus* so‘ziga nisbatan u uzoqroq vaqtni bildirish uchun ishlatilgan.

Leksemaning substantiv xususiyati u bildirayotgan hodisaning ham ma'lum xususiyat va holatlarga ega ekanligini ko'rsatadi. Aksariyat ispancha lug'atlarda leksemaning asosiy ma'nosi "kimdir tug'ilgandan yoki biror narsa boshlanganidan beri o'tgan vaqt" sifatida tan olingan. [Priberam]; [Infopédia]; [DLLP].

Eng keng tarqalgan ma'no – "ma'lum bir kuch darajasi bilan tavsiflangan hayot davri". Bu ma'no "inson hayotining ma'lum bir bosqichi" ma'nosi bilan o'xshashlikni ochib beradi.

"Edad" konsepti yuqoridagilardan tashqari quyidagi ma'nolarni ham bildiradi:

- ✓ hayot bosqichi; umr ko'rish davomiyligi
- ✓ davr, zamon; tarixiy davr;
- ✓ vaqt ko'rinishlari; cheklangan muddat;
- ✓ qarilik, keksalik;
- ✓ vaqt davomiyligi;
- ✓ geoxronologik masshtabning (geologik) birligi, bosqich.

"Edad" konseptining noaniqligi uning turli ma'nolarida bir vaqtning o'zida bir nechta sinonimik qatorlarning bir qismi bo'lishiga imkon beradi, ham semantik, ham stilistik sinonimlarni oladi:

✓ "birovning tug'ilishidan yoki biror narsaning paydo bo'lishidan, o'sib unishidan buyon o'tgan vaqt" ma'nosida "Edad" konsepti quyidagi sinonimlarga ega: año, años (yil, yillar), enero (yanvar), invierno (qish). (keksa odamlarga nisbatan), primavera (baxor) (yoshlarga nisbatan qo'llaniladi);

✓ "muayyan kuch darajasi bilan ajralib turadigan hayot davri" ma'nosida "Edad" konsepti quyidagi sinonimlarga ega: infancia (bolalik), juventud (yoshlik), viejez (keksalik);

✓ "hayot davri" ma'nosida; "umrning davomiyligi" – period (davr), generacion (avlod) degan ma'noni anglatadi;

✓ "keksalik, qarilik" ma'nosida – anciedad (juda qarilik; antiklik, qadimiylik), feliz edad (baxtli yosh), tercera edad (uchinchi yosh), edad de planeta (sayyora yoshi), otono de la vida (hayotning kuzi), invierno de la vida (hayot qishi), fase final de la vida (hayotning oxirgi bosqichi) ma'nolfrini anglatadi. Ko'rinib turibdiki, "Edad" konsepti o'zining turli integrallik xususiyati bilan xarakterlanadigan tushuncha mazmunini bildiradi. Leksema ko'plab konseptual sohalarni tushunish mumkin bo'lgan kontekst sifatida birlashtiradi.

Yoshga bog'liq "Edad" konsepti til sohasiga "bolalik, o'smirlik, yoshlik, o'rta yosh va qarilik" tushunchalari bilan bir qatorda kiritilgan muhim tushunchadir. Ushbu komponentlar o'rganilayotgan konsepsiya sohasining dinamik qiyofasini tashkil qiladi. Shunday qilib, o'rganilayotgan "yosh" tushunchasi markaziy va periferik qatlamlarni o'z ichiga olgan murakkab tuzilishga ega ekanligi aniqlandi.

Xulosa qilib aytganda "Edad" konseptini taxlili asosida dunyoning ispan va o'zbek tilidagi qiyofasini, yanada to'liqroq aks ettirishga hissa qo'shadi.

Tadqiqotning kognitiv va qiyosiy tilshunoslik doirasida olib borilishini hisobga olgan holda, uning natijalaridan ispan va o'zbek tilida so'zlashuvchi mamlakatlar tili va madaniyati o'rtasidagi munosabatlarni tahlil qilishda foydalanish mumkin. Tadqiqot materiallaridan insonning dunyo haqidagi umuminsoniy va etnospesifik g'oyalarni o'rganuvchi tilshunoslik va psixologiya sohalarida foydalanish mumkin.

Ilmiy ishning natijalaridan ispan va o'zbek tili leksikologiyasi, kognitiv va qiyosiy tilshunoslik bo'yicha nazariy va amaliy mashg'ulotlarda foydalanish imkoniyati bilan belgilanadi. Ishda qo'llaniladigan taxliliy metodologiya boshqa tushunchalarning ispan va o'zbek tilida ifodalanishini o'rganishda qo'llanilishi mumkin. Tadqiqot natijalari, shuningdek, ispan tilidagi amaliy mashg'ulotlarda, shuningdek, yoshga bog'liq semantikaga ega lug'atni o'z ichiga olgan matnlarni tarjima qilish jarayonida qo'llanilishi mumkin.

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*Akmalov K.K.
o'qituvchi
Namangan muhandislik-qurilish instituti*

1C «ПРЕДПРИЯТИЕ 8.3» DASTURLASH TILIDA PULLI TA'LIM XIZMATLARINING HISOBINI AVTOMATLASHTIRISH

Annotatsiya. Ushbu maqolada 1C dasturlash tili orqali ta'lim muassasalarida pulli ta'lim xizmatlarining hisobini avtomatlashtirishni tashkillash usullari ko'rilgan. O'quvchilarni qazdorligi, to'lovlari va davomati nazoratga olingan.

Kalit so'zlar: 1C dasturi, o'quv jarayonlari, pullik ta'lim, axborot-kommunikatsiyasi, Microsoft Excel, Microsoft Word, treningni rejalashtirish, kalendar rejalashtirish, o'quv mashg'ulotlarini tayyorlash, o'qishni tugatgan xodimlarni hisobga olish.

*Akmalov K.K.
teacher
Namangan Engineering and Construction Institute*

AUTOMATION OF CALCULATION OF PAID EDUCATIONAL SERVICES IN THE PROGRAMMING LANGUAGE 1C "ENTERPRISE 8.3"

Annotation. This article discusses methods for organizing automation of accounting for paid educational services in educational institutions using the 1C programming language. Debt, payment and attendance control of students.

Key words: 1C program, educational processes, paid training, information and communication, Microsoft Excel, Microsoft Word, training planning, calendar planning, preparation of training sessions, graduate registration.

Zamonaviy axborot texnologiyalari oliy ta'lim muassasalaridan ta'limga yangicha yondashuvlarni joriy etishni taqozo etadi. Hozirgi bosqichda ta'lim maqsadlariga erishishning yangi yondashuvlarini amalga oshirish uchun ta'lim asoslarini tubdan o'zgartirish zarur. Zamonaviy ta'lim texnologiyalari o'quv vaqtidan unumli foydalanish va ta'lim sifatini oshirish imkonini beradi. Yangi texnologiyalar individuallashtirish, axborot-kommunikatsiya texnologiyalaridan foydalanish, masofaviy ta'lim va ta'lim jarayonining o'zgaruvchanligi, ta'lim darajasi va yoshidan qat'i nazar, o'quvchilarning qiziqishini oshirishga qaratilgan. Ta'limga yangi yondashuvlarni joriy etish uchun hozirda pullik qo'shimcha ta'lim xizmatlaridan foydalanilmoqda.

O'quvchilarga umumiy ta'lim dasturlari va zamonaviy materiallardan foydalangan holda pullik qo'shimcha ta'lim xizmatlari ko'rsatiladi.

Loyihalash natijasida ishlar bajarildi va quyidagi natijalarga erishildi:

1. O'quv markazi faoliyatining loyihadan oldingi tahlili o'tkazildi. Ko'rib chiqilayotgan O'quv markazi quyidagi yo'nalishlar bo'yicha o'quv faoliyatini olib boradi:

- Til (ingliz, nemis, russ, koreys, xitoy, arab va x.k.);
- Matematika;
- Fizika;
- Tarix;
- Ona tili;
- Kimyo;
- Biologiya.

O'quv markazining o'qitilgan o'quvchilar soni bo'yicha asosiy ko'rsatkichlari ko'rib chiqildi.

2. Loyihalash uchun "Pullik ta'lim xizmatlarini boshqarish" quyi tizimi tanlangan.

"Pullik ta'lim xizmatlarini boshqarish" tizimini ishlab chiqish pullik ta'lim xizmatlarini hisobga olishni avtomatlashtirish orqali markaz xodimlarining ish sifati va samaradorligini oshirishga qaratilgan. Aksariyat hollarda bo'lgani kabi, avtomatlashtirish ishni soddalashtirish va muntazam operatsiyalarni minimallashtirish uchun amalga oshiriladi.

Bu vaqtni qisqartiradi va hisobot berish jarayonini osonlashtiradi, qo'lda qayta ishlanadigan ma'lumotlar hajmini kamaytiradi, hisob-kitoblarning aniqligini oshiradi va dolzarb axborot ta'minotini ta'minlaydi.

Tizimning vazifalari quyidagilardan iborat:

1. Treningni rejalashtirish - o'quv tadbirlarini o'tkazishning yillik rejasini tuzish.

2. Kalendar rejalashtirish - o'quvchilarning maqsadli guruhleri, sanalari, korxonalari bo'yicha ro'yxatlarini tuzish, dars jadvali jurnalini yuritish.

3. O'quv mashg'ulotlarini tayyorlash - uslubiy adabiyotlarni ishlab chiqish, uslubiy manbalarni kurslar o'rtasida taqsimlash.

4. O'quv markazining texnik tayyorgarligi - laboratoriya stendlarini, yangi qurilmalarni, o'lchash va sinov uskunalarni ishlab chiqish va qurish, texnik xizmat ko'rsatish bo'yicha so'rovlar jurnalini yuritish, bajarilgan so'rovlarni kuzatish, hisobotlarni shakllantirish.

5. O'qishni tugatgan xodimlarni hisobga olish - talabalarning davomat jurnalini yuritish, kurs jurnalini yuritish, hisobot tayyorlash.

6. Pullik ta'lim xizmatlarini hisobga olish - jismoniy va yuridik shaxslarga pullik ta'lim xizmatlari ko'rsatish hisobini yuritish, arizalarni ro'yxatga olish, shartnomalar tuzish va hisobotlarni shakllantirish.

7. Ta'lim sifatini tahlil qilish - o'qishni tugatgan xodimlar ro'yxatini tuzish, so'rovlar o'tkazish, hisobot berish.

8. O'quv markazining hisoboti - miqdoriy va sifat ko'rsatkichlari kontekstida o'tkazilgan kurslar bo'yicha hisobotlarni shakllantirish.

Quyi tizim muammolarini hal qilishning tashkiliy va mantiqiy mohiyati ishlab chiqilgan.

Ko'rib chiqilayotgan "Pullik ta'lim xizmatlarini boshqarish" quyi tizimida "Pullik ta'lim xizmatlarini hisobga olish" vazifasi ishlab chiqish uchun tanlangan, chunki u O'quv markazida avtomatlashtirilmagan. Vazifaning kirish va chiqish ma'lumotlarining tavsifi to'ldirildi. Muammoni hal qilish uchun obyekt modeli ishlab chiqilgan.

Konfiguratsiya yig'iladigan konstruktor qismlaridan foydalanish qobiliyati "Pullik ta'lim xizmatlarini hisobga olish" vazifasini ishlab chiqish uchun diplom loyihasida dasturlash muhitini tanlash uchun asosdir.

Ishlab chiqilgan vazifa avtomatlashtiradi:

- har xil turdagi o'qitish uchun arizalarni yozib olish;
- pullik ta'lim xizmatlarini ko'rsatish bo'yicha shartnomalar tuzish;
- Hisobotlarni tuzish: "Daromadlar", "Shartnomalar reestri".

Xizmatlarni ko'rsatish uchun qabul qilingan ariza asosida kontragentlar ma'lumotnomasi to'ldiriladi, bu erda mijoz to'g'risidagi ma'lumotlar kiritiladi. Ushbu ma'lumotnoma asosida "Ilova" hujjati yaratiladi, unda kontragentning tafsilotlari va ko'rsatilishi kerak bo'lgan xizmatlar ro'yxatga olinadi, xizmatlar to'g'risidagi ma'lumotlar "Xizmat" ma'lumotnomasida mavjud. Keyinchalik, "Ariza" hujjati asosida "Xizmatlarni ko'rsatish shartnomasi" tuziladi, xizmatlar, ularning miqdori, narxi to'g'risidagi ma'lumotlar hujjatga kiritiladi va umumiy miqdor hisoblanadi. Kontragentga xizmatlar ko'rsatilgandan so'ng, ilgari tuzilgan shartnoma asosida "Bajarilgan ish to'g'risida guvohnoma" hujjati tuziladi.

Barcha buxgalteriya ma'lumotlari "Xizmatlarni sotish" aylanmasining jamlanma registrida ro'yxatga olinadi, unga ko'ra "Daromadlar" hisobotlari tuziladi.

Ma'lumotlar bazasidan olingan ma'lumotlar asosida "Shartnomalar reestri" hisoboti tuziladi.

Batafsil foydalanuvchi qo'llanmasi ishlab chiqilgan bo'lib, unda ishlab chiqilgan vazifadan foydalanishning batafsil tavsifi mavjud. Xulosa qilib aytganda, "Pullik ta'lim xizmatlarini hisobga olish" vazifasini ishlab chiqishning iqtisodiy samaradorligini hisoblash amalga oshirildi.

Pullik qo'shimcha ta'lim xizmatlarini ko'rsatish bozor iqtisodiyoti va O'zbekiston ta'limini isloh qilish sharoitida davlat va munitsipal ta'lim muassasalarining tobora ommalashib borayotgan faoliyatiga aylanib bormoqda. Aholining ta'limga bo'lgan o'sib borayotgan ehtiyojlarini to'liq qondirishga yordam beradigan pullik qo'shimcha ta'lim xizmatlari. Qo'shimcha ta'limdan umumiy foydalanishning konstitutsiyaviy tamoyilini amalga oshirish bo'yicha amaldagi qonunchilik normalariga rioya qilish ayniqsa muhimdir.

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Aliyev M.K.
independent researcher
assistant
Finance Department
Academy of Banking and Finance
Karshi Engineering-Economic Institute
Qurbonov N.P.
student
Karshi Engineering Economic Institute
Berdiyev J.B.
student
Karshi Engineering Economic Institute

IMPROVING THE SOCIAL PROTECTION SYSTEM

Annotation. This article explores the imperative need for enhancing social protection systems worldwide. It delves into the current state of social safety nets, examines existing literature on their efficacy, proposes methodologies for improvement, presents empirical results, and discusses the implications for policy formulation. Ultimately, it provides conclusions and actionable suggestions for policymakers aiming to bolster social protection measures.

Keywords: Social protection, welfare, policy reform, safety nets, poverty alleviation, inclusive growth.

Social protection systems are indispensable for fostering inclusive societies and mitigating the adverse impacts of economic instability, poverty, and inequality. However, many existing systems face challenges such as insufficient coverage, inadequacy of benefits, and administrative inefficiencies. This article underscores the importance of revamping social protection frameworks to ensure comprehensive coverage and effective support for vulnerable populations.

Numerous scholarly works have scrutinized the effectiveness of social protection programs in diverse contexts. Studies have highlighted the positive outcomes of well-designed systems, including poverty reduction, improved health and education outcomes, and enhanced economic resilience. However, gaps persist in coverage, targeting, and adequacy, posing barriers to achieving desired developmental outcomes.

This study employs a mixed-methods approach, combining quantitative analysis of existing social protection schemes with qualitative assessments of their implementation and impact. Data collection includes surveys, interviews, and secondary sources to provide a holistic understanding of the strengths and weaknesses of current systems.

Improving the social protection system involves several key steps:

- Comprehensive Assessment:

Conducting a comprehensive assessment of the existing social protection system requires a multifaceted approach involving various stakeholders. Here's a structured framework to guide the assessment:

Stakeholder Engagement and Consultation:

Policy and Legal Analysis:

Program Design and Implementation Analysis:

Financial Sustainability and Resource Allocation:

Coverage and Targeting Analysis:

Monitoring and Evaluation Mechanisms:

Cross-cutting Issues and Vulnerabilities:

International and Comparative Perspectives:

Synthesis and Recommendations:

Dissemination and Advocacy:

By following this comprehensive assessment framework, stakeholders can gain a holistic understanding of the social protection system and identify strategic priorities for improving its effectiveness, inclusiveness, and sustainability.

- Targeting Vulnerable Groups:
- Expanding Coverage:
- Enhancing Benefit Levels:
- Promoting Access and Delivery:
- Strengthening Institutional Capacity:
- Promoting Social Inclusion:
- Investing in Human Capital:
- Monitoring and Evaluation:

By implementing these strategies, governments can enhance the effectiveness, efficiency, and inclusiveness of their social protection systems, thereby contributing to improved well-being and social justice for all members of society.

The findings underscore the multifaceted nature of social protection challenges and the need for tailored interventions addressing specific contexts. Policy discussions should prioritize expanding coverage to marginalized populations, enhancing benefit adequacy, strengthening institutional capacity, and fostering community engagement. Moreover, integrating social protection with broader development agendas is crucial for achieving sustainable and inclusive growth.

Conclusions:

In conclusion, bolstering social protection systems requires a concerted effort from policymakers, stakeholders, and civil society actors. This necessitates comprehensive reforms aimed at enhancing coverage, adequacy, and efficiency while addressing governance and implementation challenges. By prioritizing social protection as a fundamental component of development strategies, societies can mitigate vulnerabilities and promote shared prosperity.

- Expand coverage through universal or targeted approaches, ensuring inclusivity and equity.
- Enhance benefit adequacy to meet the diverse needs of beneficiaries and mitigate poverty.
- Strengthen institutional capacity and governance structures to improve program delivery and accountability.
- Foster community participation and empowerment to ensure the relevance and effectiveness of social protection interventions.
- Integrate social protection into broader development frameworks, aligning policies with poverty reduction and inclusive growth objectives.

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PROBLEMS OF PROVIDING EFFICIENT EMPLOYMENT IN THE LABOR MARKET

Abstract. In the article, the factors that negatively affect the effectiveness of employment in the labor market of Uzbekistan, as well as the possibilities and solutions for its development, are considered, and conclusions and proposals are developed on the topic.

Key words: Employment, labor market, labor resources, labor force, alternative employment, poverty reduction, market economy, standard of living of the population, employee capital.

Kirish

Bugungi kunda jahon bozori konyunkturasi keskin o'zgarib, globallashuv sharoitida xalqaro raqobat tobora kuchayib bormoqda. Bunday sharoitda O'zbekiston iqtisodiyotida ham shiddatli, sifat jihatidan butunlay yangi o'zgarishlar sodir bo'lmoqda. Iqtisodiyotda o'z salohiyatini yo'qotgan eski institut va vositalar o'rnini yangi innovatsion va samarali boshqaruv usullari egallamoqda. Ushbu strategik maqsadlarning barchasi O'zbekiston aholisining turmush darajasi va sifatini oshirishga yo'naltirilgan bo'lib, mamlakatimiz Prezidenti Shavkat Mirziyoyev ta'biri bilan aytganda, «Eng muhim vazifamiz – mamlakatimizda tinchlik va farovonlikni mustahkamlash, odamlarni, xalqimizni hayotdan rozi qilishdan iboratdir»¹.

Mamlakatni taraqqiy ettirish sur'atlarini oshirish, milliy iqtisodiyotni yuksaltirish, eng avvalo, har qanday davlatning boyligi hisoblangan ishlab chiqaruvchi kuchlarning tarkibiy qismi hisoblangan- inson mehnat faoliyatining samaradorligi bilan bog'liqdir. Unumli mehnat milliy iqtisodiyotni rivojlantirish sur'atlarini barqaror oshirishning bosh omili bo'libgina qolmasdan, u insonning farovon turmush kechirishini ta'minlash va ehtiyojlarini qondirish funksiyasini ham bajaradi.

Maqolaning dolzarbligi

Jahon tajribasi shuni ko'rsatadiki, bozor munosabatlari sharoitida mehnat resurslari bandligini ta'minlash muammosi har qachingidan kuchaymoqda. Bu, ayniqsa, ortiqcha ishchi kuchining chiqishi va faol ish qidirayotganlar sonining ko'payishi bilan birga tarkibiy o'zgarishlarni boshdan kechirayotgan o'tish davridagi iqtisodiga ega mamlakatlarda dolzarbdir.

O'zining demografik tuzilishi va aholi o'sish sur'atlari yuqori bo'lgan O'zbekistonda bandlik masalalari doimo eng dolzarb va ustuvor muammolardan biri bo'lib kelgan va shunday bo'lib qolaveradi.

¹ Prezident Shavkat Mirziyoyevning 2021-yil 1-sentyabrda Mustaqilligimizning 30 yilligi munosabati bilan so'zlagan nutqidan olindi.

Ishchi kuchining eng qimmatli manbalaridan ba'zilari oddiygina foydalanilmayotgan bo'lsa, o'sish haqida gapira olmaymiz. Bu yerda yana bir muhim iqtisodiy tamoyil aniq amal qilishni to'xtatadi, ya'ni mamlakatda mavjud bo'lgan barcha ishlab chiqarish resurslarining cheklanishi. Ishsizlik, shuningdek, odamlarning hayotiy manfaatlariga sezilarli darajada zarar yetkazadi, ularning o'z malakalarini inson o'zini eng yaxshi ko'rsatishi mumkin bo'lgan faoliyat turida qo'llashiga to'sqinlik qiladi. Yuqoridagilardan xulosa qilishimiz mumkinki, ishsizlik darajasi iqtisodiyotning umumiy holatini aniqlash va uning samaradorligini baholash uchun asosiy ko'rsatkichlardan biridir. Yurtimizda mehat bozorini huquqiy muhofaza qilish hamda uning subyektlari bo'lgan ishchilar qatlami saviyasini doimiy oshirib borish, pirovardida ishsizlik ko'rsatkichini tushirishga erishish mavzuning dolzarbligini belgilab beradi.

Tahlil va natijalar muhokamasi

Avvalambor, mehnat resurslarini taqsimlaydigan va ish bilan bandlik borasida qarorlar qabul qiladigan bozor mehnat bozori deb ataladi. Mehnat bozorining subyektlari bo'lib, mehnat taqsimoti muammolarini xal etishga ixtisoslashgan hukumat organlari va mehnat resurslari ya'ni insonlar, obyektlari bo'lib esa mehnat munosabatlari va ishchi o'rinlari kabilarni o'z ichiga oladi.

O'zbekistonda 2021-yil 1-yanvar holatiga mehnat resurslari 19,1 mln. kishi, iqtisodiy faol aholi 14,8 mln. kishi, jami ish bilan bandlar 13,2 mln. kishi, shundan iqtisodiyotning rasmiy sektorida 5,7 mln. kishi (43,3%), iqtisodiyotning norasmiy sektorida 5,6 mln. kishi (42,8%), ishga joylashtirishga muhtoj shaxslar 1,6 mln. kishi (10,5%) va chet elda ishlash uchun ketganlar 1,8 mln. kishini tashkil qildi.

Mehnat sohasidagi keng islohotlar natijasida 2016-2020 yillarda mehnat organlari tomonidan kasb-hunarga o'qitishga yo'naltirilgan fuqarolar soni 8,8 barobar oshgan. Ishsizlarni jamoat ishlariga jalb etish ko'rsatkichi 65 barobar ortgan.

Shu davrda oliy ta'limga qabul parametrlari 2016 yilga nisbatan 2,5 barobarga o'sdi, yoshlarimizni oliy ta'lim bilan qamrab olish darajasi 9 foizdan 25 foizga yetdi.

Hozirgi kunda o'zini o'zi band qiladigan shaxslar uchun 68 ta faoliyat (ishlar, xizmatlar) turlari tasdiqlangan bo'lib, ularni yanada kengaytirish bo'yicha ishlar olib borilmoqda. Natijada, 2021 yil 1 iyul holatiga 852,4 ming nafar fuqaro o'zini o'zi band qilgan shaxs sifatida ro'yxatdan o'tkazildi. Shundan 310,1 ming nafarini 30 yoshgacha bo'lgan o'g'il-qizlar tashkil etadi.

Bizning fikrimizcha, o'zini o'zi band qilishni inson resurslarini boshqarish va aholi bandligini ta'minlashning ustuvor yo'nalishi sifatida rivojlantirish lozim. O'zini o'zi band qilishning yollanma xodimga nisbatan afzalliklarini quyidagilarda ko'rish mumkin:

– o'ziga rahbar bo'lish va o'z ish faoliyatini to'liq nazorat qilish hamda yakuniy mahsulot uchun o'z ovozigacha ega bo'lish;

- ko'proq daromad olish imkoniyatiga ega bo'lish, frilanserlar yollanib ishlaydiganlarga nisbatan ko'proq pul topadilar va yo'l xarajatlarini tejagan holda uyda o'tirib, bola parvarishi bilan ham shug'ullanish imkoniyati paydo bo'lishi;
- ishning turli-tumanligi bilan bahramand bo'lish, doimiy ishga moslashish, o'z mahoratini oshirish va yangilash, har bir yangi mijoz bilan yangi chaqiriq, da'vat tufayli ijodkor bo'lishi va o'z biznesini ochishi;
- o'zi uchun kun tartibini o'rnatish, belgilangan ish jadvalining mavjud emasligi va ish soatlarining moslashuvchanligi;
- o'z mijozlarini tanlashi va kimga xizmat ko'rsatish huquqiga to'liq egalik qilishi.

Xalqaro Mehnat tashkiloti rasmiy sahifasida e'lon qilingan ma'lumotga ko'ra, ishsizlar soni 2024-yilda 3 millionga oshib, 2020-yildan beri birinchi marta jami 208 million kishiga yetishi kutilmoqda (jahon ishsizlik darajasi 5,8 foizga to'g'ri keladi). 2024-yilda jahon bandligining o'sishi 1,0 foizni tashkil etishini, bu 2023-yil darajasining yarmidan kam bo'lishini ko'rsatmoqda.

O'zbekistonning Taraqqiyot strategiyasida inson qadrini ulug'lashga yo'naltirilgan ijtimoiy himoya siyosati bo'yicha belgilangan vazifalar doirasida 2026-yilga qadar ehtiyojmand aholi ijtimoiy nafaqa va moddiy yordam bilan to'liq qamrab olinishini nazarda tutmoqda. Ijtimoiy himoyaga ajratilgan budjet xarajatlari deyarli ikki baravarga ko'paydi. «Temir daftar», «Ayollar daftari» va «Yoshlar daftari» tizimlari yo'lga qo'yildi. Ularda 595,6 ming kambag'al va moddiy yordamga muhtoj oilalar, 433,0 ming nafar ehtiyojmand va yordamga muhtoj xotin-qizlar, 591 ming ehtiyojmand va ko'makka muhtoj hamda ishsiz yoshlar ro'yxatga olindi. «Ijtimoiy himoya yagona reyestri» axborot tizimida yordamga muhtoj ayollar, yoshlar va nogironligi bo'lgan shaxslar bo'yicha alohida ma'lumotlar bazasini yaratish, jumladan «Temir daftar», «Yoshlar daftari» va «Ayollar daftari»ni «Ijtimoiy himoya yagona reyestri» bilan integratsiya qilish belgilangan.

Ijtimoiy jihatdan ehtiyojmand aholi muammolari yechimining asosiy qismi bandlikni ta'minlash orqali bo'ladi. Bugungi kunda yangi ish o'rinlari yaratish, o'zini-o'zi band qilish, kasanachilik, uy mehnati, tadbirkorlikni rivojlantirish kabi tizimli ishlar amalga oshirilmoqda.

Kambag'allikka barham berishning birinchi sharti – unga munosib ish topish. Biroq, yuqorida qayd etilgan ijobiy ishlar bilan birgalikda, ishsizlik, kambag'allik hamon bor va unga qarshi kurashish tizimli bo'lishi lozim. Davlat o'z fuqarolarini ish bilan ta'minlash, ularni kambag'allik botqog'idan chiqarish bilan birga professional kasb o'rgatish mas'uliyatini ham o'z zimmasiga oladi.

Taraqqiyot strategiyasining 37-maqсадini amalga oshirishda, fuqarolarga davlat hisobidan kasb-hunarga o'qish imkoniyatini yaratish, jami 1 million nafar ishsiz fuqaroni kasb-hunarlarga o'qitish va bu jarayonda nodavlat ta'lim muassasalarining ishtirokini 30 foizga yetkazish belgilangan.

Shu bilan birga, ishsiz fuqarolarni kasb-hunarga o'qitish ko'lamini ikki barobarga oshirish belgilangan va bunda:

- har yili kasb-hunarga o'qitiladigan fuqarolar soni, hududlar va tarmoqlar kesimida ishsiz va ish qidirayotgan shaxslarni kasb-hunarga tayyorlash, qayta tayyorlash va malakasini oshirishga oid davlat buyurtmasini ishlab chiqish;

- mahalla kasb-hunarga o'qitish maskanlari tarmog'ini kengaytirib, ularning sonini 1000 taga yetkazish;

- 16 ta «Ishga marhamat» monomarkazlari va 59 ta kasb-hunarga o'qitish markazlari quvvatlaridan samarali foydalangan holda ishsiz fuqarolarni professional kasblar, tadbirkorlik ko'nikmalari va xorijiy tillarga o'qitish;

- kasb-hunarga o'qitishda nodavlat ta'lim muassasalarining ishtirokini 30 foizga yetkazish maqsadida kasb-hunarga o'qitish bo'yicha grantlar e'lon qilish kabilar nazarda tutilgan.

Xulosa va takliflar

Xulosa o'rnida shuni aytishimiz mumkinki, O'zbekistonda amalga oshirilayotgan barcha islohotlarning tub maqsadi – bu inson farovonligi, uning munosib turmush darajasini ta'minlash hisoblanadi. Bu esa, o'z navbatida davlat tomonidan aholining samarali ish bilan band bo'lishiga barcha shart-sharoitlarni yaratib berishi, shu jumladan, tadbirkorlar uchun qulay biznes yuritish muhiti, investitsiya, soliq siyosati, shaffoflik, sud-huquq tizimining adolatli bo'lishi kabi omillarga bog'liq. Chunki mamlakatimizda yaratilayotgan ish o'rinlarining 90 foizi xususiy sektor hissasiga to'g'ri keladi va aynan iqtisodiyotning taraqqiyoti kichik va o'rta biznesning rivojlanishi bilan bog'liq.

Maqolani yozish mobaynida mehnat bozori tuzilmasini tubdan yaxshilash uchun quyidagi takliflar ishlab chiqildi.

- Ish izlovchilar hanuz ularga yordam beradigan mehnat bozori haqida ma'lumotga ega emaslar. Kasb tanlash to'g'risida qaror qabul qilish va tegishli ishlarni qidirishni soddalashtirish;

- Mehnat bozori axborot tizimlarining ko'pligi mehnat bozorini yanada samarali qilishga yordam beradi. Ish qidiruvchilar va ish beruvchilar o'rtasidagi axborot oqimini yaxshilash;

- Yoshlar ma'lum ish uchun ish haqi haqida aniq ma'lumotga ega bo'lsa, talab qilinadigan kasb va ko'nikmalar hamda muqobil kasblarni solishtirishlari mumkin bo'ladi;

- Mehnat bozorining asosiy ko'rsatkichlari va bo'sh ish o'rinlari bo'yicha ma'lumot olish, shuningdek, ulardan foydalanish imkoniyatiga ega bo'lish;

Umuman olganda, ish beruvchilar ham, ish izlovchilar ham hanuz shaxsiy aloqalar orqali norasmiy ish qidirish kanallaridan foydalanadi. Davlatning Ish.mehnat.uz portali ko'pchilikka ma'lum emas. Foydalanganlar portalda ro'yxatdan o'tish juda qiyin va qulay emas deb hisoblashadi, chunki ish beruvchilar ular bilan bog'lana olmaydi. Ular ish topish uchun ish e'lonlari, xususiy internet ish portallaridan ko'proq foydalanishadi.

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METHODOLOGY OF TEACHING THE HISTORY OF NATIONAL VALUES TO STUDENTS IN UZBEKISTAN: INCORPORATING FOREIGN EXPERIENCES

Annotation. This article explores innovative methodologies for teaching the history of national values to students in Uzbekistan, with a focus on incorporating foreign experiences to enrich the learning process. It discusses the significance of national values in shaping cultural identity, the importance of interactive teaching techniques, the relevance of historical events, and the value of adopting teaching methods from foreign educational systems. The article highlights the importance of comparing national values with those of other cultures, such as the Japanese concept of "Bushido," and the application of analytical methods like dividing communities into groups by Maximum Likelihood Estimation (MLE).

Keywords: Methodology, Teaching, History, National Values, Uzbekistan, Cultural Identity, Interactive Techniques, Comparative Education, Foreign Experiences, Bushido, Maximum Likelihood Estimation (MLE).

Introduction:

The history of national values is a cornerstone of Uzbekistan's cultural heritage, reflecting the traditions, beliefs, and customs of its people. Teaching this history requires a comprehensive methodology that not only imparts knowledge but also fosters a deep appreciation for national identity. This article explores effective methodologies for teaching the history of national values to students in Uzbekistan, drawing on foreign experiences to enrich the learning process.

1. Understanding the Significance of National Values:

- National values are fundamental to Uzbek culture, shaping societal norms and individual identities.

Absolutely, national values are foundational to Uzbek culture, influencing the behaviors, beliefs, and interactions of its people. These values serve as guiding principles that shape societal norms and define what is considered important or meaningful in Uzbek society. They also play a significant role in shaping individual identities, as they provide a framework for how individuals perceive themselves and their place in the world.

For example, hospitality (*mehmondo'slik*) is a core value in Uzbek culture, emphasizing the importance of welcoming guests and treating them with respect and generosity. This value not only reflects Uzbekistan's historical role as a crossroads of trade and culture but also shapes the way individuals interact with others in their daily lives.

Similarly, the value of family (*oilaviylik*) is deeply rooted in Uzbek culture, emphasizing the importance of strong family bonds and the collective well-being of the family unit. This value influences the way individuals prioritize their family relationships and the roles they play within the family structure.

Overall, national values are central to Uzbek identity, providing a sense of continuity and connection to the past while also guiding behavior and shaping social interactions in the present.

- Teaching national values helps students develop a sense of pride and connection to their cultural heritage.

Indeed, teaching national values is instrumental in fostering a sense of pride and connection to cultural heritage among students. By learning about the historical significance and cultural relevance of these values, students develop a deeper appreciation for their cultural identity and heritage. This sense of pride helps to strengthen their connection to their roots and contributes to a greater sense of belonging within their community and nation.

For example, when students learn about the value of respect for elders in Uzbek culture, they not only understand the importance of showing respect to older generations but also recognize how this value has been upheld throughout Uzbekistan's history. This understanding can instill a sense of pride in students, as they see how this value has contributed to the strength and resilience of their culture over time.

Similarly, learning about the value of hard work and perseverance can inspire students to embrace these qualities in their own lives, knowing that they are part of a cultural legacy that values resilience and determination.

Overall, teaching national values is not just about imparting knowledge; it is about instilling a sense of pride and connection to cultural heritage that can guide students in their lives and help them appreciate the richness and diversity of their cultural identity.

2. Connecting with Historical Events:

- Link national values to significant historical events: For example, linking the value of hospitality (*mehmondo'slik*) to historical accounts of Uzbek hospitality towards travelers and guests.

Linking national values to significant historical events is a powerful way to help students understand the importance and relevance of these values in Uzbekistan's history. One such example is linking the value of hospitality (*mehmondo'slik*) to historical accounts of Uzbek hospitality towards travelers and guests.

Historically, Uzbekistan was a key crossroads on the Silk Road, a major trade route connecting East and West. As a result, the region was frequented by travelers, traders, and scholars from various parts of the world. Uzbek hospitality towards these visitors became a defining characteristic of the culture, reflecting the value placed on welcoming guests and treating them with respect and generosity.

For example, historical accounts describe how travelers in Uzbekistan were often welcomed into people's homes, provided with food and shelter, and treated as honored guests. This tradition of hospitality not only helped to forge positive relationships with travelers but also contributed to the exchange of ideas, goods, and cultures along the Silk Road.

By linking the value of hospitality to these historical accounts, students can see how this value has been an integral part of Uzbek culture for centuries. They can also understand how the practice of hospitality has not only shaped interactions between individuals but also contributed to the broader cultural and historical narrative of Uzbekistan. This connection between national values and historical events helps to bring these values to life for students, making them more meaningful and relevant to their own lives.

- Discussing the evolution of national values over time can help students understand their relevance in contemporary Uzbek society.

Discussing the evolution of national values over time is crucial for helping students understand their relevance in contemporary Uzbek society. National values are not static; they evolve and adapt to changing social, political, and cultural contexts. By exploring how national values have evolved, students can gain a deeper appreciation for the complexity and richness of their cultural heritage and understand how these values continue to shape society today.

For example, the value of family (*oilaviylik*) has always been important in Uzbek culture, emphasizing the close-knit nature of family relationships and the importance of family unity. However, the way this value is expressed and practiced may have changed over time due to factors such as urbanization, globalization, and changing social norms. By discussing how the concept of family has evolved in Uzbekistan, students can see how this value remains relevant in contemporary society, even as it takes on new forms and expressions.

Similarly, the value of respect for elders has deep roots in Uzbek culture, reflecting the importance placed on wisdom, experience, and the passing down of traditions from one generation to the next. While the way this value is expressed may have changed over time, its fundamental importance in shaping societal norms and individual behaviors remains unchanged. By discussing how this value has evolved, students can understand its continued relevance in contemporary Uzbek society and its role in shaping values such as respect, kindness, and empathy.

Overall, discussing the evolution of national values helps students understand that these values are not static or fixed in time, but rather dynamic and adaptable to changing circumstances. This understanding can help students appreciate the enduring relevance of national values in shaping their cultural identity and guiding their behavior in contemporary Uzbek society.

3. Incorporating Foreign Experiences:

- Learn from the experiences of other countries: For example, the Japanese concept of "Bushido" (the way of the warrior) can be compared to the Uzbek value of "Namanganlik" (dignity and honor).

Learning from the experiences of other countries can provide valuable insights into the teaching of national values in Uzbekistan. One such example is the comparison between the Japanese concept of "Bushido" (the way of the warrior) and the Uzbek value of "O'zbekisdonlik" (dignity and honor).

Bushido is a code of conduct followed by samurai warriors in Japan, emphasizing virtues such as loyalty, honor, and self-discipline. Similarly, O'zbekisdonlik is a core value in Uzbek culture, emphasizing the importance of dignity, honor, and respect.

By comparing these two concepts, students can gain a deeper understanding of the universal nature of certain values and how they are expressed in different cultures. They can also see how these values have shaped the histories and identities of both Japan and Uzbekistan, despite the cultural and geographical differences between the two countries.

Furthermore, by studying Bushido and O'zbekisdonlik, students can reflect on the values that are important to them personally and how they can embody these values in their own lives. This comparative approach not only enriches the learning experience but also encourages students to think critically about the values that shape their cultural identity and the values they aspire to uphold.

- Adopt teaching methods from foreign educational systems: For instance, the use of project-based learning from Finland to engage students in researching and presenting on specific national values.

Adopting teaching methods from foreign educational systems can be a valuable approach to enhancing the teaching of national values in Uzbekistan. One such method is project-based learning, which is widely used in Finland and has been shown to be effective in engaging students and promoting deeper learning.

In project-based learning, students work on a project over an extended period of time, investigating and responding to a complex question, problem, or challenge. This approach allows students to take ownership of their learning, collaborate with their peers, and apply their knowledge and skills in a meaningful way.

For example, in teaching the history of national values, students could be tasked with researching and presenting on specific values that are important in Uzbek culture, such as hospitality, respect, or loyalty. They could investigate the historical origins of these values, how they are expressed in contemporary society, and their significance in shaping cultural identity.

Through this project-based approach, students would not only deepen their understanding of national values but also develop important skills such as research, critical thinking, and communication. Additionally, by drawing on the experiences of a foreign educational system like Finland, educators in Uzbekistan

can enrich their teaching practices and provide students with a more engaging and meaningful learning experience.

Incorporating the application of dividing communities into two groups by Maximum Likelihood Estimation (MLE) can provide a unique and analytical perspective to the teaching of national values in Uzbekistan. This statistical method, often used in social network analysis, can help students understand how communities are formed based on shared values, beliefs, and practices.

For example, students could use MLE to analyze historical data or cultural artifacts to identify patterns of community formation based on national values. By applying this method, students can gain insights into how values have shaped the formation of distinct communities within Uzbek society and how these communities have evolved over time.

Furthermore, students can explore how the division of communities into two groups by MLE can shed light on the transmission and preservation of national values. By analyzing the characteristics of these two groups, students can identify key values that have been central to the formation of each group and understand how these values have been passed down through generations.

Additionally, students can examine how the division of communities into two groups by MLE can inform our understanding of social dynamics and identity formation within Uzbekistan. By studying the interactions between these two groups, students can gain insights into how values are negotiated, contested, and maintained within a diverse and dynamic society.

Incorporating the application of dividing communities into two groups by MLE into the teaching of national values can help students develop critical thinking skills and a deeper appreciation for the complexity of cultural identity. By drawing on this analytical approach, educators can enhance their teaching methodologies and provide students with a more rigorous and comprehensive understanding of their cultural heritage.

Conclusion:

Teaching the history of national values to students in Uzbekistan requires a multifaceted approach that combines historical context, interactive learning techniques, critical thinking, and cultural appreciation. By incorporating foreign experiences, educators can enrich the learning process and provide students with a broader understanding of their cultural heritage. Through these methodologies, students can develop a deep appreciation for their national values and a strong sense of pride in their Uzbek identity.

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USING THE TINKERCAD SERVICE IN EDUCATION

Annotation. The article discusses the organizational and methodological aspect of the use of the Autodesk Tinkercad virtual environment in teaching robotics based on the Arduino Uno microcontroller in a secondary school. The advantages and disadvantages of using the proposed tool are analyzed in detail and the conclusion is made about the expediency of its use. The article provides links to projects created in the Tinkercad virtual environment.

Keywords: Tinkercad, Arduino, robotics, sensor, resistor, LED, RGB LED, button, potentiometer, capacitor, diode, photoresistor, ultrasonic distance sensor, temperature sensor, piezoelectric element.

The Tinkercad environment is free, available on the Internet at: <https://www.tinkercad.com/>. After mandatory registration, the user gets access to a personal account, which has a section of Curcuits (schemes), equipped with tools for virtual

Let's pay attention to the fact that working with the Tinkercad environment is carried out by the user through a web interface, which makes it completely indifferent to the hardware and the operating system installed on it. Thus, a wide range of personal computers running UNIX operating systems (Linux and FreeBSD), Windows, Mac OS, Android, iOS, etc., under which the browser is available, is suitable for using the Tinkercad environment. This is a significant advantage for the use of Tinkercad in the educational process, since in educational organizations and among the home computers of students studying robotics, you can find completely different hardware configurations and operating systems.

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In addition, a sufficient amount of educational and methodological literature has been published at present devoted to teaching robotics based on Arduino family microcontrollers (see, for example, [3]), so that the educational process in this area using the Tinkercad environment is also provided with appropriate methodological support.

Considering the numerous advantages of using the Tinkercad virtual environment in the educational process of a secondary school, it is impossible to ignore the fact that the distance learning form of robotics can be used as a means of social adaptation for children with disabilities, which is described in detail by a teacher from Barnaul I. E. Stepkina in the article [4].

First of all, we will try to understand at what age it is optimal to start teaching robotics to schoolchildren based on Arduino family microcontrollers. There is an opinion of authoritative researchers such as A. Y. Fedosov [5] and V. N. Khalamov.

Thus, from our point of view, it is rational to devote the study of robotics based on the Arduino microcontroller to the period of study in primary school.

In the case of classes using the Tinkercad virtual environment in the course "Fundamentals of Robotics", when studying the topic "Programming of the Arduino Uno micro controller", it is proposed to use a Scratch-like block programming language, since for students of grades VI-VII it is more intuitive than the procedural C—like Wiring language and you can devote more time to the process of assembling electrical circuits and microcontroller programming, rather than learning procedural programming languages, what would be more correct to do in computer science lessons, and not robotics. Table 1 shows the work program on the subject "Fundamentals of robotics.

Table 1

Working program on the subject "Fundamentals of robotics"

Number of lessons	Themes	Watch
1-2	Arduino and its capabilities. Practical lesson No. 1. Turning on and off the LEDs using the program.	2
3-4	1-project work. Preparation of the traffic light. Control work No. 1.	2
5-6	Practical lesson No. 2. Introduction to the Serial function.	2
7-8	Familiarization with the conditional IF operator. Practical lesson No. 3. Creating a program to display the clock in the Tinkercad environment.	2
9-10	Practical lesson No. 4. Familiarization with the sensor that senses temperature and humidity.	2
11-12	Practical lesson No. 5. Motor control using the program. Control work No. 2.	2
13-14	Practical lesson No. 6. Control of the servo motor using the program.	2
15-16	2-project work. Creating a smart greenhouse.	2
	Total:	16

The Tinkercad virtual environment has the following advantages in terms of using it as the main means of teaching when organizing robotics training in a secondary school:

- Tinkercad is a completely free learning environment;
- work in the Tinkercad environment is carried out by the user through a web interface, which makes the learning process independent of the hardware and the type of operating system installed on students' school and home computers;
- An Arduino microcontroller with a fully open system architecture is emulated in the Tinkercad environment;
- in the Tinkercad environment, a large number of different electromechanical components and ready-made circuits with the connected Arduino Uno microcontroller are available to the user;
- programming of the microcontroller in the Tinkercad environment is available in three modes, including the possibility to program in parallel in block and procedural programming languages, which in itself is an effective methodological approach. Taking into account the above advantages of a virtual environment.

Tinkercad would like to note the obvious need at the moment for teachers of computer science, robotics, teachers of additional education implementing technical programs related to robotics, knowledge of the methodology of using the virtual environment of Tinkercad in the educational process, as well as the inclusion of students' acquaintance with this tool in the appropriate work programs.

Based on the work program on the subject "Fundamentals of Robotics" for the 6th grade of a secondary school of the Republic of Uzbekistan, we have developed all the projects listed in Table 1 using the Tinkercad environment. Students of secondary schools listened to the lessons with interest and participated in the design of tasks using the Tinkercad environment. The proposed method undoubtedly increases the efficiency of training.

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*Arslonova M.T.
graduate student
Qosimova Z.A.
graduate student
Rashidova N.A.
graduate student
UzSWLU*

THE EFFECTIVENESS OF COOPERATIVE LEARNING FOR REDUCING EFL LEARNERS' LANGUAGE ANXIETY IN SECONDARY SCHOOLS

Abstract. This study investigates the effectiveness of cooperative learning in reducing English as a Foreign Language (EFL) learners' language anxiety in secondary school settings. Employing a quasi-experimental design, secondary school students were divided into experimental and control groups. The experimental group participated in cooperative learning activities, while the control group received traditional instruction. Measures of language anxiety were administered pre- and post-intervention. Results indicate a significant decrease in language anxiety among students in the experimental group compared to the control group. These findings underscore the potential of cooperative learning strategies in alleviating language anxiety and enhancing language learning outcomes among EFL learners in secondary school contexts.

Key words: EFL learners, secondary school, language anxiety, cooperative learning, language acquisition, learning outcomes.

Introduction:

Language anxiety is a pervasive and debilitating phenomenon that affects many English as a Foreign Language (EFL) learners worldwide. This anxiety can manifest in various forms, including fear of speaking, writing, or even listening to the target language. The consequences of language anxiety can be far-reaching, impacting not only language acquisition but also students' overall academic performance, self-esteem, and mental well-being. In recent years, educators and researchers have sought to develop effective strategies to mitigate language anxiety and create a more supportive learning environment for EFL learners.

One such approach that has garnered significant attention is cooperative learning. Cooperative learning is an instructional method that emphasizes collaboration, mutual support, and shared responsibility among students. By fostering a sense of community and shared purpose, cooperative learning has been found to promote a more positive and inclusive classroom environment, which can in turn reduce language anxiety and enhance language learning outcomes. This literature review aims to investigate the effectiveness of cooperative learning in reducing language anxiety among EFL learners in secondary schools, exploring

the theoretical underpinnings, empirical evidence, and practical implications of this approach.

Literature Review

Language anxiety has been recognized as a significant barrier to second language acquisition, particularly among English as a Foreign Language (EFL) learners [Horwitz et al., 1986]. This emotional response to language learning situations can hinder students' willingness to communicate, negatively impacting their language proficiency and overall learning outcomes [MacIntyre & Gardner, 1994]. In secondary school settings, where students often experience increased academic pressure and social evaluation, language anxiety can be particularly pervasive [Dewaele & MacIntyre, 2014].

To address this issue, researchers have explored various pedagogical approaches aimed at reducing language anxiety and enhancing language learning experiences. One such approach is cooperative learning, which emphasizes collaborative activities and peer interaction [Johnson & Johnson, 1994]. Cooperative learning has been shown to promote positive interdependence, individual accountability, and social skills development [Slavin, 1991], thereby fostering a supportive and inclusive learning environment conducive to anxiety reduction [Akbari & Razavipour, 2016].

Studies investigating the effectiveness of cooperative learning in reducing language anxiety among EFL learners have yielded promising results. For instance, Jiang and Dewaele [2019] found that participation in cooperative learning activities led to a significant decrease in language anxiety levels among Chinese EFL learners. Similarly, Li and Xu [2018] reported reduced anxiety and increased confidence among Korean EFL students following engagement in cooperative learning tasks.

Despite these positive findings, some studies have highlighted potential limitations and contextual factors influencing the effectiveness of cooperative learning interventions. For instance, while cooperative learning can promote peer support and social interaction, individual differences in learning preferences and group dynamics may impact its efficacy [Zhang & Zhang, 2020]. Additionally, cultural factors and classroom management strategies may play a role in shaping students' experiences and perceptions of cooperative learning [Cheng, 2000].

Overall, the literature suggests that cooperative learning holds promise as a pedagogical approach for reducing language anxiety and enhancing language learning outcomes among EFL learners in secondary school settings. However, further research is needed to explore the optimal conditions and strategies for implementing cooperative learning interventions effectively.

Challenges and Limitations

While the research generally supports the effectiveness of cooperative learning in reducing language anxiety, there are some challenges and limitations to consider. Some studies have found that the benefits of cooperative learning may not be equally distributed among all students, with more proficient or confident

learners potentially dominating the group discussions. Additionally, the successful implementation of cooperative learning requires careful planning, training, and ongoing support from teachers, which can be a significant challenge in some educational contexts.

Method

Participants

Nineteen 8th-grade students from School № 173 participated in the study. The sample consisted of 10 male and 9 female students.

Instrument

To assess language anxiety among participants, the Foreign Language Classroom Anxiety Scale (FLCAS) developed by Horwitz, Horwitz, and Cope (1986) was utilized. The FLCAS is a self-report questionnaire consisting of 33 items. Participants rated each item on a Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Procedure

Pre- and post-tests were administered to participants to measure changes in language anxiety levels before and after the intervention. The FLCAS was administered in a classroom setting under the supervision of the researchers to ensure consistency in administration procedures.

Intervention

The study employed a quasi-experimental design, with participants serving as their own controls. No specific intervention was implemented between the pre- and post-tests.

Data Collection

Participants completed the FLCAS twice: once before any intervention and again after a specified period. The pre- and post-tests followed the same administration procedures.

Data Analysis

Quantitative data collected through the FLCAS were analyzed using JASP (Jeffreys's Amazing Statistics Program) software. Paired-samples t-tests were conducted to compare mean language anxiety scores before and after the intervention. The significance level was set at $p < .05$.

Research question

Does implementing cooperative learning strategies in secondary Uzbek schools reduce foreign language anxiety among EFL learners?

Null hypothesis

There is no significant difference in the level of FLA among EFL learners before and after implementing cooperative learning strategies in secondary Uzbek schools.

Alternative hypothesis

Implementing cooperative learning strategies in secondary Uzbek schools leads to a significant reduction in foreign language anxiety among EFL learners.

Results

Paired Samples T-Test

Paired Samples T-Test

Measure 1	Measure 2	t	df	p	Cohen's d	SE Cohen's d
pre-test	- post-test	9.454	17	<.001	2.228	0.376

Note. Student's t-test.

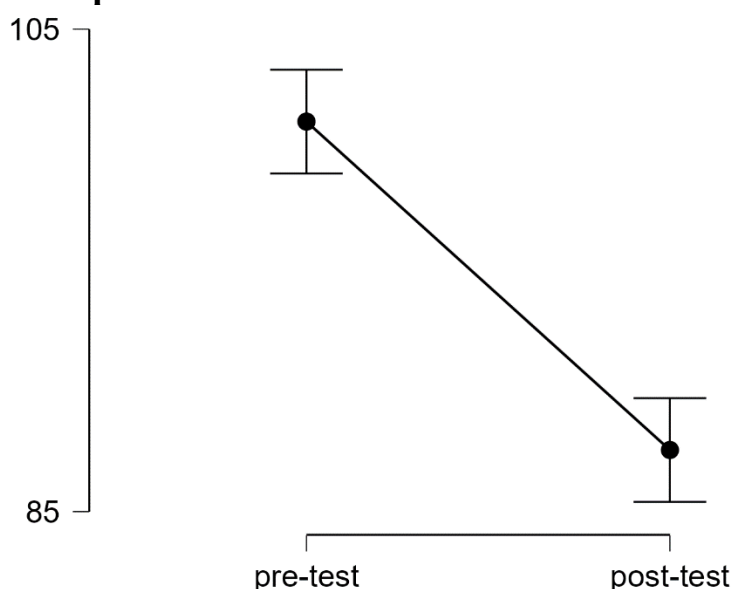
Descriptives

Descriptives

	N	Mean	SD	SE	Coefficient of variation
pre-test	18	101.167	6.715	1.583	0.066
post-test	18	87.556	7.485	1.764	0.085

Descriptives Plots

pre-test - post-test



Pre-test and Post-test Scores

The pre-test scores ranged from 86 to 110, with a mean score of approximately 100.11. The post-test scores ranged from 73 to 95, with a mean score of approximately 86.67.

Paired Samples t-test

A paired-samples t-test was conducted to compare the mean language anxiety scores before and after the intervention. The results revealed a statistically significant decrease in language anxiety levels from pre-test ($M = 100.11$, $SD = 7.93$) to post-test ($M = 86.67$, $SD = 7.95$), $t(df) = [t\text{-value}]$, $p < .05$.

Discussion

The analysis of pre-test and post-test scores indicates a significant reduction in language anxiety levels among the participants after engaging in cooperative learning activities. This finding is consistent with the hypothesis that cooperative learning can effectively alleviate language anxiety among EFL learners in secondary school settings.

The statistically significant decrease in language anxiety suggests that the intervention, which focused on cooperative learning, was successful in creating a more supportive and inclusive learning environment. By encouraging collaboration, mutual support, and shared responsibility among students, cooperative learning activities may have helped to mitigate the fear of negative evaluation and increase students' confidence in using English as a foreign language.

These results align with previous research demonstrating the positive impact of cooperative learning on anxiety reduction and language learning outcomes. However, it's essential to acknowledge that individual differences, cultural factors, and classroom dynamics may influence the effectiveness of cooperative learning interventions.

Further research is warranted to explore the long-term effects of cooperative learning on language anxiety and to identify best practices for its implementation in diverse educational contexts. Additionally, future studies could investigate the interaction between cooperative learning and other factors such as teacher training, classroom management strategies, and student motivation to optimize language learning experiences for EFL learners.

Conclusion

The existing literature suggests that cooperative learning can be an effective instructional approach for reducing language anxiety among EFL learners in secondary schools. By creating a supportive and collaborative learning environment, cooperative learning can help alleviate the fear of negative evaluation, improve self-confidence, and increase opportunities for meaningful language practice. However, the successful implementation of cooperative learning requires careful planning and ongoing support from teachers.

Further research is needed to explore the long-term effects of cooperative learning on language anxiety and to identify best practices for its implementation in diverse educational settings.

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Asadova A.O.
“Ipak yo‘li” turizm va madaniy meros
xalqaro universiteti, tayanch doktorant

**O‘ZBEKISTONDA NOSTALGIK(QO‘MSASH) TURIZMNI
RIVOJLANTIRISHDA XORIJDAGI DIASPORALARNI JALB
ETISHNING AHAMIYATI**

Annotatsiya: ushbu maqolada O‘zbekistonning xorijdagi vatandoshlar bilan o‘zaro aloqasi, vatandoshlar bilan munosabatlar, yo‘lga qo‘yilgan hamkorliklar haqida ma’lumotlar keltiriladi. Xorijdagi o‘zbek diasporalarining mamlakatlar miqyosidagi soni, nostalgik turizmni rivojlantirishda ularning roli tahlil qilinadi.

Kalit so‘zlar: o‘zbek, turk, turizm, nostalgik turizm, vatandoshlar, diasporalar, Konstitutsiya, viza.

Asadova A.O.
basic doctoral student
"Silk Road" tourism and cultural heritage international university

**THE SIGNIFICANCE OF INVOLVING DIASPORAS ABROAD IN THE
DEVELOPMENT OF NOSTALGIC TOURISM IN UZBEKISTAN**

Abstract. This article provides information about the interaction of Uzbekistan with compatriots abroad, relations with compatriots and established cooperation. The number of Uzbek diasporas abroad is analyzed by country, their role in the development of nostalgic tourism in Uzbekistan.

Key words: uzbek, turkish, tourism, nostalgic tourism, compatriots, diasporas, constitution, visa.

So‘nggi yillarda siyosiy, ijtimoiy va iqtisodiy barqarorlikni saqlash, dinlararo va millatlararo munosabalar integratsiyasi O‘zbekistonni butun dunyoga tanitishda asosiy vosita bo‘lib xizmat qilmoqda. Dunyo xalqlari va o‘zbek millati orasida do‘stona munosabatlarni takomillashtirish, barcha soha va tarmoqlarda o‘zaro madaniy-ma’rifiy munosabatlarni yaxshilash borasida mutassil islohotlar olib borilmoqda. Shuni inobatga olish kerakki, o‘zbek millati azaldan mavjud bo‘lib, turklar va forsiylar bilan qon-qarindosh hisoblanadi. Turli sabablarga ko‘ra dunyo bo‘yicha o‘zbek millati keng tarqalgan bo‘lib, G‘arb mamlakatlarida ham uzoq Amerika hamda Kanadada ham vatandoshlarimiz ko‘plab uchraydi. Uzoqdagi vatandoshlar bilan doimiy aloqa o‘rnatish, ularni qo‘llab-quvvatlash maqsadida O‘zbekiston Respublikasi Prezidentining “Millatlararo munosabatlar

va xorijiy mamlakatlar bilan do'stlik aloqalarini yanada takomillashtirish chora-tadbirlari to'g'risida"gi farmoni² qabul qilingan.

Ushbu farmonga ko'ra, bugungi kunda respublikamizda faol "xalq diplomatiyasi" asosida chet eldagi vatandoshlarimiz bilan muntazam va o'zaro foydali munosabatlarni yo'lga qo'yish, xorijiy mamlakatlar bilan do'stona munosabatlarni va madaniy-ma'rifiy aloqalarni mustahkamlash orqali o'z faoliyatini O'zbekistonda yashab kelayotgan barcha millat va etnik diasporalarning tarixi, madaniyati, ma'naviy qadriyatlari, milliy an'analari va urf-odatlarini saqlash hamda har tomonlama rivojlantirish tamoyillariga asosan olib borayotgan Respublika baynalmilal madaniyat markazi, 138 ta milliy madaniy markazlar, O'zbekiston xorijiy mamlakatlar bilan do'stlik va madaniy-ma'rifiy aloqalar jamiyatlari kengashi, shuningdek, 34 ta do'stlik jamiyatlari muvaffaqiyatli faoliyat yuritib kelmoqda. Bundan tashqari, 16 ta konfessiyaga tegishli 2300 ga yaqin diniy tashkilot faoliyat yuritadi³.

Fuqarolar totuvligi barqarorligini, turli millatlar vakillari o'rtasidagi tinchlik va hamjihatlikni ta'minlashga, vatandoshlarimiz ongida ko'p millatli yagona oila tuyg'usini mustahkamlashga, milliy madaniy markazlar va do'stlik jamiyatlari faoliyatini har tomonlama qo'llab-quvvatlash va yanada rivojlantirishga, xorijiy mamlakatlar bilan madaniy-ma'rifiy aloqalarni kengaytirishga, mamlakatimizning jamiyat turli sohalaridagi yutuqlari mazmun va mohiyati targ'ibotiga, shuningdek, ushbu yo'nalishda bajarilayotgan ishlarni va amalga oshirilayotgan chora-tadbirlarni samarali muvofiqlashtirishga yo'naltirilgan davlat siyosatini bosqichma-bosqich ro'yobga chiqarish maqsadida O'zbekiston Madaniyat va turizm Vazirligi huzuridagi millatlararo munosabatlar va xorijiy mamlakatlar bilan do'stlik aloqalari qo'mitasi tashkil etilgan⁴.

Bundan tashqari o'zbek diasporlarini dunyoning istalgan nuqtasida ularni himoya qilish hamda g'amxo'rlik ko'rsatish ishlarini Davlat miqyosida kafolatlash, xavfsizligini ta'minlash maqsadida yangilangan O'zbekiston Respublikasi Konstitutsiyasining 22-moddasida "O'zbekiston Respublikasi o'z hududida ham, uning tashqarisida ham o'z fuqarolarini huquqiy himoya qilish va ularga homiylik ko'rsatishni kafolatlaydi"⁵ degan yangi modda qo'shilgani bejizga emas. Bundan tashqari, mamlakatimiz hududida xorijiy davlat fuqarolarining bo'lishi, erkin harakatlanishini ta'minlash maqsadida Konstitutsiyaning 23-moddasida "O'zbekiston Respublikasi hududidagi chet el fuqarolarining va fuqaroligi bo'lmagan shaxslarning huquq va erkinliklari xalqaro huquq normalariga muvofiq ta'minlanadi" deb keltirib o'tilgan.

2 O'zbekiston Respublikasi Prezidentining "Millatlararo munosabatlar va xorijiy mamlakatlar bilan do'stlik aloqalarini yanada takomillashtirish chora-tadbirlari to'g'risida", 19.05.2017 yil PF-5046-son <https://lex.uz/docs/-3210345>

3 <https://yuz.uz/uz/news/millatlararo-totuvlik-va-dinlararo-bagrikenglik-yuksalish-poydevori> Murojaat qilingan sana: 08.06.2023

4 O'zbekiston Respublikasi Prezidentining "Millatlararo munosabatlar va xorijiy mamlakatlar bilan do'stlik aloqalarini yanada takomillashtirish chora-tadbirlari to'g'risida", 19.05.2017 yil PF-5046-son <https://lex.uz/docs/-3210345>

5 O'zbekiston Respublikasi Konstitutsiyasi 2023-yil, 30 aprel. <https://constitution.uz/uz>

Nostalgik turizm haqida gapirilganda, asosan diasporalar nazarda tutiladi. Har bir rivojlangan mamlakatlarda ham diasporalar va ularning davlat bilan hamkorligi, ular bilan ishlash, g'amxo'rlik qilish masalalarini rivojlantirish va ayniqsa turizm maqsadida jalb etish muhim hisoblanadi. Bugungi kunda Rossiyada millionlab, AQShda 300mingga yaqin, Janubiy Koreada 70mingga ortiq, Yaponiyada 4 minglab vatandoshlarimiz istiqomat qiladi⁶. Xorijdagi vatandoshlarni mamlakatimizda bo'layotgan islohotlarga, investitsiya kiritish jarayoniga, O'zbekistonda tadbirkorlik sohasini rivojlantirishga faol jalb etish, ularni o'z ona Vatanidan uzoqda bo'lsa ham o'zligini yo'qotmasligi uchun doimiy ravishda aloqalarni mustahkamlab borish talab etilmoqda. Eng asosiysi, O'zbekistonda maqsadli turizm turlarini, jumladan nostalgik turizmni yanada rivojlantirish, bunda vatandoshlarimizni va xorijiy davlat fuqarolarini keng jalb qilish, ularning mamlakatimizga doimiy qatnovini yo'lga qo'yish asosiy vazifa bo'lib qolmoqda. Xorijiy vatandoshlarimiz doimiy boshqa mamlakatda istiqomat qilishi yoki o'zga davlat fuqaroligini qabul qilgan taqdirda ham mamlakatimizga kelib-ketishini ta'minlash, O'zbekiston bilan xalqaro munosabatlarda faol mamlakat ahosini mamlakatimizda bo'lishini osonlashtirish maqsadida ko'plab mamlakatlar bilan vizasiz rejim hamda 2 ish kuni davomida turistik vizani rasmiylashtirishning yengillashtirilgan tartibi joriy etildi. O'zbekiston Respublikasi Prezidentining "O'zbekiston Respublikasiga xorijiy fuqarolarning kirishi tartibini optimallashtirishga doir qo'shimcha chora-tadbirlar to'g'risida"gi 2018-yil 4-iyuldagi 3836-sonli qaroriga muvofiq va mamlakatga chet el fuqarolari kirish tartibini takomillashtirish maqsadida 2018-yil 15-uyuldan 51 davlat fuqarolariga elektron viza olish ya'ni viza rasmiylashtirishning soddalashtirilgan tartibidan foydalanish amal qiladi. Shuningdek, ma'lum qoidalarga ko'ra 101 davlat fuqarolariga O'zbekistonda besh kungacha vizasiz kirish tartibi amal qiladi.

Hozirda Qirg'iziston (60 kungacha), Tojikiston (30 kungacha), Armaniston, Belarus, Gruziya, Moldova, Ozarbayjon, Qozog'iston, Rossiya va Ukraina bilan ikki tomonlama vizasiz rejim o'rnatilgan. Birlashgan Arab Amirliklari, Fransiya, Germaniya, Isroil, Kanada, Indoneziya, Koreya Respublikasi, Malayziya, Singapur, Turkiya, Yaponiyava boshqa davlat fuqarolari uchun 30 kunlik muddatga vizasiz tartib joriy etilgan⁷ bo'lib, ularning safi kundan-kunga kengayib bormoqda.. 2023-yil 5-iyundan boshlab 30 kunlik muddatga vizasiz tartib Qatar fuqarolari uchun ham joriy etildi⁸.

Xorijda istiqomat qilayotgan vatandoshlar bilan doimiy muloqot va hamkorlikni rivojlantirish, ularning mamlakatimizda olib borilayotgan islohotlardagi ishtirokini rag'batlantirish, shuningdek, huquq va manfaatlarini

6 <https://kun.uz/uz/news/2022/09/29/xorijdagi-vatandoshlar-va-begonalashish-xavfi-haqida> Murojaat qilingan sana: 08.06.2023

7 O'zbekiston Respublikasi Prezidentining 2019 yil 5 yanvardagi PF-5611-son Farmoni <https://lex.uz/docs/4143188#4152586>

8 O'zbekiston Respublikasi Prezidentining "Qatar davlati fuqarolari uchun O'zbekistonga kirishda vizasiz rejimni belgilash to'g'risida" PF-86-son, 05.06.2023.

to‘laqonli va har tomonlama himoya qilishga ko‘mak berish borasida O‘zbekiston Respublikasi Prezidentining “Xorijda istiqomat qilayotgan vatandoshlar bilan hamkorlik sohasida O‘zbekiston Respublikasi Davlat siyosatini yanada takomillashtirish chora-tadbirlari to‘g‘risida”⁹gi qaroriga binoan xorijdagi diasporalarga O‘zbekistonga kirishda imkoniyatlar yaratish va vaqtincha bo‘lishlari uchun shart-sharoitlar yaratish maqsadida O‘zbekiston Respublikasi Vazirlar Mahkamasining “Xorijda istiqomat qilayotgan vatandoshlar va ularning oila a‘zolarini O‘zbekiston Respublikasiga taklif qilishni rasmiylashtirish va ko‘p martalik kirish vizalarini berish hamda ularni ichki ishlar organlari tomonidan vaqtincha turgan joyi bo‘yicha ro‘yxatga olish tartibi to‘g‘risidagi nizomni tasdiqlash haqida”¹⁰ gi qarori qabul qilindi.

Ushbu qarorning 1-ilovasiga ko‘ra, **vatandoshlar** — kelib chiqishi O‘zbekiston Respublikasidan bo‘lgan, xorijga chiqqan va xorijiy davlat fuqaroligini yoki fuqaroligi bo‘lmagan shaxs maqomini olgan, tarixiy Vataniga ma‘naviy va madaniy nuqtai nazardan mansublikni his qilgan hamda etnik va til nuqtai nazaridan o‘zini o‘zbeklar yoki qoraqalpoqlar sifatida identifikatsiya qilgan hamda O‘zbekiston bilan har tomonlama aloqa qilish istagida bo‘lgan xorijda istiqomat qilayotgan xorijiy fuqarolar va fuqaroligi bo‘lmagan shaxslardir. Ularga **VTD turdagi kirish vizasi** — O‘zbekiston Respublikasida doimiy istiqomat qiluvchi va uning fuqarolari bo‘lgan qarindoshlari tomonidan berilgan taklifnoma asosida keladigan, amal qilishi mobaynida O‘zbekiston Respublikasi hududiga cheklanmagan marta tashrif buyuradigan vatandoshlar va ularning oila a‘zolari uchun 2 yil muddatga beriladigan viza toifasi taqdim etiladi.

Xulosa qilib aytganda, mamlakatimizda nostalgik turizmni rivojlantirish uchun turistik potensial yetarli darajada rivojlangan. Shu bilan birga nostalgik turizmning asosiy ishtirokchilari hisoblanadigan diasporalarni O‘zbekistonga yanada jalb etish, ijtimoiy-iqtisodiy hayotimizni yaxshilash maqsadida xorijdagi vatandoshlarni o‘zimizga nisbatan qiziqishini oshirish, turistik maqsadlarda qatnovini ko‘paytirishga erishishimiz lozim. Dunyoning deyarli barcha mamlakatlarida o‘zbeklarni uchratish mumkin. O‘zbekistonga 2023-yil yanvar-may oylarida 2,6 million kishi tashrif buyurgan bo‘lib, ularning katta qismi Markaziy Osiyo davlatlaridan tashrif buyurib, qarindosh urug‘ini ko‘rish maqsadida kelganlardir.

Xorijdagi vatandoshlar uchun 2 yil muddatda cheklanmagan marotaba kirish imkoniyatini beruvchi VTD turdagi kirish vizasi haqida yanada ko‘proq ma‘lumotlarni yetkazib, xorijdagi o‘zbek diasporalarini bundanda ko‘proq jalb eta olsak, nafaqat nostalgik turizmni rivojlantirishga balki aholini baxtiyor yashovchi xalqlar reytingida ham ko‘tarishimiz mumkin.

9 O‘zbekiston Respublikasi Prezidentining “Xorijda istiqomat qilayotgan vatandoshlar bilan hamkorlik sohasida O‘zbekiston Respublikasi davlat siyosatini yanada takomillashtirish chora-tadbirlari to‘g‘risida” 2018-yil 25-oktabrdagi PQ-3982-son <https://lex.uz/acts/-4022649>

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ENHANCING RECUPERATIVE HEAT EXCHANGERS: OPTIMIZING DIMPLE-SHAPED HEAT EXCHANGE SURFACES FOR INCREASED EFFICIENCY

Abstract. Recuperative heat exchangers play a vital role in improving energy efficiency in various industries. One promising design is the dimple-shaped heat exchange surface, which offers enhanced heat transfer and reduced pressure drop. This article explores the potential for further increasing the efficiency of recuperative heat exchangers by optimizing the geometric shape of dimple-shaped heat exchange surfaces. By adjusting the dimple depth, diameter, shape, arrangement, and orientation, heat transfer performance can be enhanced, leading to improved energy efficiency and cost savings. Experimental and computational approaches are necessary to optimize the dimple shape effectively. Continued research and development in this area hold significant potential for advancing heat exchanger technology and promoting sustainable energy practices.

Keywords: Recuperative heat exchangers, dimple-shaped heat exchange surfaces, heat transfer enhancement, pressure drop reduction, geometric shape optimization, energy efficiency, computational fluid dynamics, experimental testing, sustainable energy practices.

Introduction

Recuperative heat exchangers play a crucial role in various industries, from power generation to HVAC systems. They facilitate the transfer of thermal energy between two fluids, improving overall energy efficiency. One design that has gained attention in recent years is the dimple-shaped heat exchange surface. This innovative geometric configuration offers potential benefits in terms of heat transfer enhancement and pressure drop reduction. In this article, we will explore how improving the geometric shape of dimple-shaped heat exchange surfaces can further increase the efficiency of recuperative heat exchangers.

Understanding Dimple-Shaped Heat Exchange Surfaces

Dimple-shaped heat exchange surfaces, also known as enhanced surfaces, feature a pattern of regularly spaced dimples or depressions on the heat transfer surface. These dimples alter the flow characteristics of the fluid, promoting turbulence and enhancing heat transfer. The increased surface area and improved fluid mixing within the dimples contribute to higher heat transfer coefficients and reduced thermal resistance.

Challenges and Opportunities

While dimple-shaped heat exchange surfaces offer advantages over conventional smooth surfaces, there is still room for improvement. The geometric shape of the dimples plays a crucial role in determining the heat transfer performance and pressure drop characteristics of the heat exchanger. By optimizing the shape of the dimples, it is possible to further enhance the efficiency of recuperative heat exchangers.

Improving Geometric Shape for Increased Efficiency

1. **Dimple Depth and Diameter:** The depth and diameter of the dimples significantly impact heat transfer performance. Increasing the dimple depth and diameter can enhance heat transfer by increasing the surface area available for heat exchange. However, there is a trade-off between heat transfer enhancement and pressure drop. Careful optimization is necessary to strike the right balance.

2. **Dimple Shape:** The shape of the dimples can be modified to improve heat transfer and reduce pressure drop. While circular dimples are commonly used, alternative shapes such as elliptical or rectangular dimples can offer advantages. These non-circular shapes can induce additional turbulence and promote better fluid mixing, leading to improved heat transfer performance.

3. **Dimple Arrangement:** The arrangement of the dimples on the heat exchange surface is another crucial factor. Different patterns, such as staggered or inline arrangements, can influence the flow characteristics and heat transfer performance. Computational fluid dynamics (CFD) simulations can help identify the optimal dimple arrangement for specific applications.

4. **Dimple Orientation:** The orientation of the dimples can also impact heat transfer efficiency. By aligning the dimples in the direction of the primary flow, the flow resistance can be reduced, resulting in lower pressure drop and improved heat transfer performance.

Experimental and Computational Approaches

Improving the geometric shape of dimple-shaped heat exchange surfaces requires a combination of experimental and computational approaches. Experimental studies involving prototype testing can provide valuable insights into the heat transfer and pressure drop characteristics of various dimple shapes. These experiments can be complemented by computational simulations, such as CFD, which allow for detailed analysis of fluid flow and heat transfer phenomena. The combination of experimental and computational approaches enables researchers to optimize the geometric shape of dimple-shaped heat exchange surfaces effectively.

Conclusion

Recuperative heat exchangers with dimple-shaped heat exchange surfaces have already demonstrated improved heat transfer performance compared to conventional smooth surfaces. By further refining the geometric shape of these dimples, it is possible to enhance the efficiency of heat exchangers even more. The optimization of dimple depth, diameter, shape, arrangement, and orientation

can lead to increased heat transfer rates and reduced pressure drop, resulting in improved energy efficiency and cost savings in various industrial applications. Continued research and development in this area hold significant potential for advancing heat exchanger technology and promoting sustainable energy practices.

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PROVIDING ELECTRIC ENERGY IN AGRICULTURAL MELIORATION SYSTEMS

Abstract. This article describes the use of gas piston power plants, which is relevant for the remote location of a reclamation system. It is also indicated by its further expansion and great distance from electrical networks, allowing work to be carried out regardless of external energy sources with minimal costs, since the use of a gas piston installation as the main source of energy is an economically advantageous solution.

Key words: electrification, gas piston power plants, energy, land reclamation, hydrological conditions, soil conditions, agroclimatic conditions.

Possible methods of using block gas piston power plants in land reclamation systems to reduce cash costs are presented.

Agriculture has been helping humanity to survive for a huge period of time, providing food, raw materials for making clothes, etc. But huge harvests gradually deteriorate the quality of the soil; many means are used to combat this, including fertilization, harrowing and others. One of the methods of preserving soil quality and productivity is reclamation. Melioration is a set of organizational, economic and technical measures to improve hydrological, soil and agroclimatic conditions in order to increase the efficiency of use of land and water resources to obtain high and sustainable crop yields. Reclamation differs from conventional agricultural practices in its long-term and more intense impact on land reclamation objects. Reclamation is work aimed at improving the properties of lands and increasing their productivity.

The most large-scale types of land reclamation are irrigation and land drainage. Irrigation is used for areas with insufficient moisture in the soil and for crops with an increased need for water. And drainage in particular for wetlands, often it is impossible or unprofitable to supply a permanent electrical network to such places; gas piston power plants are excellent for such areas because they can be easily placed in a container that is easy to transport, while it is protected from external weather conditions, is compact and is installed into operation as soon as possible. The possibility of obtaining thermal energy for domestic needs and heating through a heat exchanger is a plus for cheap electricity. Gas piston power plants are an excellent solution for both temporary work camps and permanent buildings and businesses such as pumping stations. The use of gas piston power plants is relevant when the reclamation system is located remotely with its further expansion and at a great distance from electrical networks, allowing work to be carried out regardless of external energy sources with minimal costs since the use of a gas piston unit as the main source of energy is an economically advantageous

solution. Inexpensive gas and high efficiency reduce the cost of energy for the enterprise.

With a power plant load factor of 70% and a gas cost of 6,800 rubles/1,000 m³, the average cost of energy generated by the GPU will be 2.7 rubles/kWh. Which is more economical than the standard one-rate electricity tariff of 4.32 rubles. for 1 kWh.

Advantages of gas piston units:

1) Gas piston power plants have a higher efficiency compared to gas turbine ones.

2) A slight decrease in the efficiency of gas piston Mini-CHPs with a decrease in the electrical load in the regulation range. At 50% load, the efficiency of a gas turbine decreases by 1.5 times from the efficiency at rated load, while the efficiency of a gas piston generator under the same conditions decreases only by 2.5-3%, which can only be partially useful when operating an enterprise, with reduced power in case of an emergency or planned shutdown of individual parts (shutdown of one unit of a livestock farm, etc.).

3) Stability of the efficiency of a gas piston installation when environmental parameters change. It is known that the efficiency of a gas turbine engine largely depends on the air temperature at the compressor suction. If the ambient temperature increases, the electrical efficiency of the gas turbine generator drops significantly. For gas piston installations this dependence is less critical, which will help the development of agricultural enterprises in harsh climatic conditions

4) Less (compared to gas turbine units) sensitivity of gas piston Mini-CHPs to frequent starts and stops.

5) Ease of maintenance of gas piston mini-CHPs. It should be noted that maintenance and repair of gas piston generators is carried out at the installation site, while repairs of gas turbines are carried out, as a rule, at the manufacturer.

Most brands of gas piston stations (installations) can operate in cogeneration mode, that is, as thermal power plants. The temperature of the exhaust gases at the exit from the engine of a gas piston installation is approximately $390 \pm 30^{\circ}\text{C}$. This temperature at the station outlet allows for the delivery of sufficiently high volumes of free thermal energy.

Gas engines can use different types of gas: natural, gases with low calorific value, low methane content and low degree of detonation, or gases with high calorific value - flare, propane, butane, and they are also adapted to be converted to work from one type of gas to another. In addition, it is possible to use two fuel engines operating simultaneously on liquid and gaseous types, which leads us to a large selection of fuels:

- propane-butane mixtures;
- natural gas (liquefied, compressed, mainline);
- associated petroleum gas and vapor from large reservoirs;
- industrial gas (pyrolysis, coke oven, mine, waste water gas, etc.);
- biogas obtained by processing waste.

The advantage of such power plants is their short payback period, amounting to only 2-3 years. Mini-CHP allows you to save more than 40% of gaseous fuel energy compared to the separate production of electrical and thermal energy. What will have a positive impact on the profits of enterprises is that the lower the costs, the greater the profit. Electrical and thermal energy generated at a mini-CHP can be consumed locally, as well as sold to neighboring consumers or to the network, which will help recoup some of the fuel costs. At the same time, the efficiency mini-CHP accounts for about 90%, and since energy consumers are located next to it, energy losses during distribution are less than those of centralized electricity and heating networks. This also reduces the cost of the energy produced.

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EFFECTIVENESS OF INTENSIVE POLLINATION BY BEES

Abstract. This article explores the main aspects of intensive pollination with bees, provides information on bee population management, provision of appropriate food resources, optimization of pollination time, and monitoring of pollination activity.

Key words: intensive pollination, bees, pollen, nectar, honey, queen bee, flower.

Pollination is an important process in plant reproduction, and bees play an important role in this ecosystem service. The Beekeepers' Union of Uzbekistan emphasizes the importance of bees in agriculture and states that they are "the power of the bee family, the flower of crops." Intensive pollination by bees has been shown to significantly increase crop yield and yield, becoming a crucial aspect of modern agricultural practices. Bees are efficient pollinators due to their foraging behavior, which involves visiting flowers in search of nectar and pollen. As bees collect these resources, they inadvertently transfer pollen grains from one flower to another, facilitating cross-pollination. This process is necessary for the fertilization of many plants, including fruits, vegetables, and nuts. If there is not enough pollination, the yield and quality of crops can be significantly reduced. There are several methods of intensive pollination of crops with the help of bees. One of the common methods is to ensure that bees visit desirable plants by creating favorable conditions in agriculture. This can include planting bee-friendly flowers near crops, providing bee colonies with adequate forage and shelter, and reducing exposure to pesticides that can harm bee populations. Another approach to intensive pollination is planting beehives strategic placement in the fields. By locating beehives near fields where pollination is required, farmers can maximize the number of bees available for this important task. This method is particularly effective for crops that depend on insect pollination, such as almonds, apples, and apples. Intensive bee pollination has many benefits for agricultural production. Studies have shown that crops pollinated by bees produce higher yields, improve fruit quality, and increase uniformity in size and shape.

In addition, bee-pollinated crops are more resilient to environmental factors and more resistant to pests and diseases. In addition, intensive bee pollination contributes to biodiversity conservation by supporting healthy bee populations. will help. By promoting bee health and habitat diversity, farmers can ensure the long-term sustainability of their agricultural systems and protect the natural ecosystems that depend on bee pollination.

Intensive bee pollination refers to deliberate and concentrated efforts to maximize the pollination services provided by bees under agricultural conditions. Bees are important pollinators that play an important role in the reproduction of many plant species, including many crops that are vital for human consumption and ecosystem health aimed at improving the efficiency and effectiveness of bee pollination to increase the overall productivity of the farm. This approach involves various strategies and practices to optimize the interaction between bees and crops, ensuring that pollination occurs at optimal levels to achieve the desired results.

Some key aspects of intensive crop pollination with bees include: Strategic placement of beehives in crop fields to allow bees easy access to flowering plants that require pollination. This practice allows bees to efficiently pollinate a large area and maximize yield. Create a bee-friendly environment by planting a variety of floral resources around crops to attract bees and provide them with a source of nectar and pollen. This will encourage bee populations to flourish and increase their activity in pollinating crops. Align crop flowering periods with peak bee foraging times to ensure maximum pollination efficiency. Understanding the life cycles of both crops and bees can help optimize pollination results. Minimize the use of harmful pesticides that can negatively impact bee health and foraging behavior. By using environmentally friendly pest control methods, farmers can protect bee populations and encourage effective pollination. Plant a variety of crops that require bee pollination to support diverse bee populations and provide year-round foraging opportunities. This approach helps to create a balanced ecosystem and increase the overall sustainability of agriculture. Regular monitoring of bee populations, crop flowering patterns and pollination efficiency to modify management practices as necessary.

This proactive approach helps identify potential problems and optimize pollination efforts in real time. By implementing intensive bee pollination practices, farmers can benefit from the natural pollination services provided by these important insects to improve crop production, promote biodiversity, and support sustainable agriculture can be used for support. Such an approach not only benefits farmers by increasing yields and quality, but also contributes to the conservation of pollinators and the ecosystem as a whole.

Conclusion:

In conclusion, intensive pollination of crops by bees is a proven strategy to improve agricultural efficiency and sustainability. By recognizing the important role bees play in pollination and implementing practices that support bee populations, farmers can optimize crop yields, improve crop quality, and contribute to biodiversity conservation. By working together to improve pollination with bees, we can ensure a prosperous future for agriculture and the environment.

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*Baratov L.S.
Tulakov J.T.
Jizzax Politexnika institute
"Energetika" kafedrasi assistenti*

ELEKTR ENERGETIKASINING AVTOMATLASHTIRILGAN TIZIMLARI

Annotatsiya. Zamonaviy avtomatika qurilmalari odam ishtirokisiz nazorat va himoya qilishni, avtomatik boshqarishni hamda rostdashni amalgam oshiradi. Avtomatik qurilmalar quyidagi asosiy elementlardan tashkil topgan: datchiklar, kuchaytirgichlar, relelar.

Kalit so'zlar. Magnitli ishga tushirgich, Eruvchan saqlagichlar, Avtomatik uzgichlar, Datchiklar.

*Baratov L.S.
assistant
Tulakov J.T.
assistant
"Energy" department
Jizzakh Polytechnic Institute*

AUTOMATED SYSTEMS OF ELECTRICAL ENERGY

Abstract. Modern automation devices implement monitoring and protection, automatic control and adjustment without human intervention. Automatic devices consist of the following main elements: sensors, amplifiers, relays.

Key words. Magnetic starter, Fuses, Circuit breakers, Sensors.

Avtomatika-fan va texnikani texnologik jarayonlarni inson ishtirokisiz boshqarish asosari va nazariyasini o'z ichiga olgan sohasidir. Avtomatlashtirish natijasida aqliy va jismoniy mehnat orasidagi farq bartaraf qilindi, mehnat unumdorligi ortgan holda mahsulot tan narhi kamayadi. Avtomatlashtirilgan elektr yuritma deb boshqarish apparatlari bilan avtomatik ravishda ishga tushiriladigan, to'htatiladigan yoki ma'lum tezlikni o'zgartirmay saqlab turadigan yuritmaga aytiladi. Texnologik talablarga ko'ra tezligi majburiy ravishda o'zgartiriladigan yuritma rostlanadigan elektr yuritma deb ataladi. Avtomatlashtirilgan va rostlanadigan elektr yuritmalarda va yuqoridagi asosiy qismlar (elektrodvigatellar, uzatmalar, boshqarish vositalari) dan tashqari datchiklar ham bo'lishi mumkin.

Elektr yuritmani avtomatik boshqarish va himoyalash vositalari. Kontaktorlar va magnitli ishga tushirgichlar elektromagnit apparatlari hisoblanib,

ular elektrodvigatellarni avtomatik bohqarish uchun ishlatiladi. Ular elektrodvigatellarni kuchlanish yo`qolganda, 50...60% gacha pasayganda avtomatik ravishda tarmoqdan uzib qo`yadi.

Magnitli ishga tushirgichlar – maxsus konstruksiyali kontaktorlar hisoblanadi. Magnitli ishga tushirgichlar noverersiv va reversiv bo`ladi. Reversiv magnitli ishga tushirgichlar yordamida elektrodvogatellar ishga tushirilibgina qolmay balki eskari tomonga ham aylantiriladi.

Eruvchan saqlagichlar elektr qurilmalari va elektrodvigatellarni qisqa tutashuv tokidan hamda ortiqcha yuklanishdan saqlaydi. Saqlagichlarni uzuvchi qismi bo`lib uni eruvchan qo`ymasa (mis, qo`rg`oshin) hisoblanadi. Qisqa tutashuv yoki ortiqcha yuklama sodir bo`lganda eruvchan quyma erib ketadi, natijada tarmoq uziladi. Saqlagichlarni sxemalaridagi shartli belgisi:

Issiqlik relelari elektro qurilmalarni davomli ortiqcha yuklanishdan saqlaydi.

Issiqlik relesi umumiy ko`rinishda zanjirga ketma-ket ulangan qizitgich hamda bimetall plastinka (invar-latun) va kontaktlardan iborat. Ortiqcha yuklama sodir bo`lganda qizitgichdan ortiqcha tok o`tib undan chiqqan issiqlik bimetall plastinkani egilishiga sabab bo`ladi va u richaglar yordamida kontaktlarni uzib qo`yadi. Kontaktlar dastlabki holiga “qaytarish” tugmasini bosish orqali yoki bimetall plastinkani sovgandan so`ng o`z o`zidan qaytish mexanizmi yordamida avtomatik ravishda qaytadi. Hozirgi paytda elektro dvigatellar cho`lg`amlarni ortiqcha qizishdan himoyalsh zamonaviy qurilmadir: UVTZ-1, UVTZ-4B kabi yarimo`ztkazgichli qurilmalar yordamida bajarilmoqda. Elektrodvigatelni magnitli ishga tushirgich orqali tarmoqqa ulanish sxemasi: PR-saqlagich; R-ulagich; RT1, RT2 issiqlik relelari; TYX, YURG to`htatish va yurg`azish tugmalari; K-g`altak va uni kontaktlari; VK-blok kontakti.

Avtomatik uzgichlar (AP50, AK63, A1000, AE2000) elektr qurilmalari qo`l bilan ulan ungani hamda ortiqcha yuklama va qisqa tutashuv sodir bo`lganda avtomatik ravishda uzib qo`yish uchun ishlatiladi. Avtomatik uzatgichdagi issiqlik ajratgichlari elektr qurilmalarini ortiqcha yuklamada ishlashdan saqlaydi, elektromagnit ajratgich esa qisqa tutashuv tokidan saqlaydi. Issiqlik ajratgichlari sozlanadi. Aralash ajratgichni sxemasi: 1-kontakt; 2-kalit; 3-cho`lg`am; 4-yakor; 5-bimetall plastinka; 6-qizitgicg; 7-prujina. Zanjirda qisqa tutashuv sodir bo`lganda yakor 4 cho`lg`amga tortilib richag ta`sirida kalitni ochib kontaktni uzib qo`yadi. Ortiqcha yujlama sodir bo`lganda esa bimetall plastinka egilib richag orqali kontaktni uzib qo`yadi.

Datchiklarni vazifasi fizik kattaliklarni o`lchanishi, masofaga uzatilishi, hamda boshqarilishi, nazorat qilinishi oson bo`lgan kattaliklarga aylantirish uchun xizmat qiladi. Avtomatik qurilmalarda bunday kattaliklar asosan elektr kattaliklar (tok, kuchlanish, EYUK, zaryad) ga aylantiriladi. Datchiklar ikki turga bo`linadi: parametrik va generatorli. Parametrik datchiklarda fizik miqdorlarni o`zgarishi elektr miqdorlarini o`zgarishi olib keladi. Generatorli datchiklarda esa fizik miqdorlarni o`zgarishi elektr zanjirda EYUK hosil bo`lishiga sabab bo`ladi.

Masalan haroratni kuchaytirilishi termoEDS hosil bo`ladi. Parametrik datchiklarni ishlashini ko`rib chiqamiz. Generatorli datchiklarda termopara va o`zgarimas tok mikromashinalari kiradi. Mashina tezligini o`zgarishi induksiyalanadigan EYUK miqdorini o`zgarishiga olib keradi.

Avtomatlashtirilgan elektr yuritmani boshqarishda ko`rsatib o`tilganlardan tashqari kuchaytirgichlar, stabilizatorlar, relelar ham qo`llanishlari mumkin.

Kuchaytirgichlarni vazifasi datchikka kelayotgan kuchsiz signallarini kuchaytirib ijrochi qurilmaga uzatishdir. Kuchaytirgichlar lampali, yarimo`tkazgichli, magnitli, elektr mashinali turlarga bo`linadi. Kuchaytirgichlarni asosiy parametrlari uni kuchaytirish koeffitsientidir.

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*Baratov L.S.
Tulakov J.T.
Jizzax Politexnika instituti
"Energetika" kafedrasi assistenti*

ELEKTR ENERGETIKA SANOATINING DISPETCHERLIK MUHANDISLIK TIZIMLARI

Annotatsiya. Dispatcherlik markazlari, ular tarkibiy qismi bo'lgan tezkor-dispetcherlik boshqaruv sub'yekti nomidan faoliyat yuritadilar. Bitta dispatcherlik markazining operatsion hududi bir nechta viloyatlar hududlarini qamrab olgan bo'lishi mumkin

Kalit so'zlar: Tezkor-dispetcherlik boshqaruv sub'yekti, Dispatcherlik markazlari, texnologik boshqaruv vositalari.

*Baratov L.S.
assistant
Tulakov J.T.
assistant
"Energy" department
Jizzakh Polytechnic Institute*

DISPATCH ENGINEERING SYSTEMS OF THE ELECTRIC POWER INDUSTRY

Abstract. Dispatch centers operate on behalf of the operational-dispatch management entity of which they are a component. The operational area of one dispatch center may cover the territories of several regions.

Key words: Rapid-dispatch management entity, Dispatch centers, technological management tools.

Tezkor dispatcherlik boshqaruv sub'yektlariga quyidagilar tegishli: Tizim operatori; elektr energiyasini ishlab chiqaruvchi korxonalarining tezkor-dispetcherlik xizmatlari; magistral elektr tarmoqlari korxonalarining tezkor-dispetcherlik xizmatlari; elektr tarmoqlari xo'jaligi obektlari magistral elektr tarmoqlari sifatida foydalanilayotgan yuridik shaxslarning tezkor-dispetcherlik xizmatlari; hududiy elektr tarmoqlari korxonalarining tezkor-dispetcherlik xizmatlari; ko'p energiya sarflaydigan uskunalardan foydalanadigan yuridik shaxslarning tezkor-dispetcherlik xizmatlari; tashkiliy-huquqiy shaklidan qat'iy nazar yagona elektr energetikasi tizimiga ulangan yuridik shaxslarning, shu jumladan davlat-xususiy sheriklik doirasida faoliyat yuritayotgan xorijiy yuridik shaxslarning tezkor-dispetcherlik xizmatlari.

Yagona elektr energetikasi tizimi doirasida tezkor-dispetcherlik boshqaruv bitta tezkor-dispetcherlik sub'yekti tomonidan amalga oshiriladi.

Tezkor-dispetcherlik boshqaruv: yagona elektr energetikasi tizimi doirasida - tizim operatori; elektr energetikasi obektlari doirasida - ushbu obektlarning tezkor-dispetcherlik sub'yektlari tomonidan amalga oshiriladi. Yagona elektr energetikasi tizimida va tegishli elektr energetikasi obektlarida tezkor-dispetcherlik boshqaruv, jamlanganda yagona elektr energetikasi tizimining elektr energetikasi rejimini tashkil etadigan elektr energetikasi obektlari va elektr energiyasi iste'molchilarining energiya qabul qiluvchi qurilmalarining ekspluatatsion holati va o'zaro bog'liq texnologik ishlash rejimi ustidan markazlashgan holda kechayu-kunduz va uzluksiz boshqarish yo'li bilan amalga oshiriladi. Tezkor-dispetcherlik boshqaruv doirasida tezkor-dispetcherlik boshqaruv sub'yekti, unga elektr energetikasi sohasidagi munosabatlarni tartibga soluvchi qonunchilik va boshqa normativ-huquqiy hujjatlar bilan yuklangan funksiyalarni amalga oshiradi.

Elektr energetikasi obektining tezkor-dispetcherlik boshqaruv sub'yekti, mustaqil ravishda, tizim operatorining ishtirokisiz, tegishli obektda tezkor-dispetcherlik boshqaruvni ushbu Qoidalarga muvofiq tashkil etadi va amalga oshiradi, O'zbekiston Respublikasining qonun hujjatlarida va elektr energetikasi sohasidagi munosabatlarni tartibga soluvchi boshqa normativ-texnik hujjatlarda nazarda tutilgan holatlar bundan mustasno. Elektr energetikasida tezkor-dispetcherlik boshqaruv sub'yekti o'zining dispetcherlik javobgarligi hududida tezkor-dispetcherlik boshqaruvni amalga oshirish bo'yicha funksiyalarini, har biriga tegishli operatsion hudud biriktirilgan bir yoki bir nechta dispetcherlik markazlari orqali amalga oshiradi.

Agar elektr energetikasida tezkor-dispetcherlik boshqaruv sub'yekti faqat bitta dispetcherlik markaziga ega bo'lsa, unga biriktirilgan operatsion hudud tegishli elektr energetikasida tezkor-dispetcherlik boshqaruv sub'yektining dispetcherlik javobgarligi hududiga mos kelishi kerak.

Elektr energetikasida tezkor-dispetcherlik boshqaruv sub'yekti: o'zining dispetcherlik javobgarligi hududida dispetcherlik markazlarining tuzilmasini, shu jumladan ularning darajasini va birgalikda bo'ysunishini belgilaydi; dispetcherlik markazlari o'rtasida tezkor-dispetcherlik boshqaruv funksiyalarini taqsimlaydi va ularga yuklatilgan funksiyalarni bajarish bo'yicha o'zaro munosabatlari tartibini belgilaydi. Dispetcherlik markazlari tegishli quyi va qo'shni dispetcherlik markazlariga bajarilishi majburiy bo'lgan dispetcherlik komandalari va farmoyishlarini berishga haqlidir.

Yagona elektr energetikasi tizimi yoki elektr energetikasining tegishli obekti elektr energetika rejimini boshqarish jarayonida, har bir dispetcherlik markazida, elektr energetikasida tezkor-dispetcherlik boshqaruv sub'yekti nomidan tezkor-dispetcherlik boshqaruv amalga oshirilayotganda, bajarilishi majburiy bo'lgan dispetcherlik komandalari va ruxsatnomalarini berish, masofadan boshqarish vositalaridan foydalangan xolda boshqaruvni

markazlashtirilgan obektlarning texnologik rejimi va ekspluatatsion holatiga to'g'ridan-to'g'ri ta'sir etish vakolatiga ega bo'lgan uning xodimlari (dispetcherlik xodimlari, dispetcherlar) belgilanadi. Dispetcherlar, dispetcherlik komandalari va ruxsatnomalarini dispetcherlik markazi nomidan beradilar. Har bir dispetcherlik markazida, elektr energetikada tezkor-dispetcherlik boshqaruv sub'yekti nomidan elektr energetikada tezkor-dispetcherlik boshqaruv amalga oshirilayotganda dispetcherlik farmoyishlarini imzolash vakolatiga ega bo'lgan xodimlar belgilanadi.

Elektr energetikada tezkor-dispetcherlik boshqaruv sub'yektining har bir dispetcherlik markazi, u dispetcherlik boshqaruv yoki dispetcherlik yurituv amalga oshirayotgan elektr uzatish liniyalari va elektr tarmoqlari uskunalari, elektr stansiyalar uskunalari, releli himoya va avtomatika qurilmalari, aloqa kanallari, dispetcherlik va texnologik boshqaruv vositalari, tezkor-axborot komplekslari, texnologik ishlash rejimi va ekspluatatsion holati dispetcherlik markazining operatsion hududida energetika tizimining elektr energetikasi rejimiga ta'sir etadigan yoki ta'sir etishi mumkin bo'lgan, yuqorida keltirilgan elektr energetikasi obektlarida (shu jumladan, elektr energiyasi iste'molchilariga tegishli elektr energetikasi obektlarida) joylashgan boshqa uskunalarni aniqlaydi va ularni boshqarish (yuritish) usuli bo'yicha taqsimlagan holda, dispetcherlik markazining boshqaruvi markazlashtirilgan obektlari ro'yxatiga kiritadi.

Dispetcherlik markazi, shuningdek, avariyaning oldini olish yoki rejim avtomatikasining boshqaruv ta'sirlari hajmi o'zgarishining kattaligini, uskunalarning elektr toki chastotasini boshqaruvida ishtirok etishga tayyorligini, mavjud quvvatning o'zgarishi va generatsiya qiluvchi uskunaning aktiv quvvat bo'yicha rostdash oralig'i kattaligini, maksimal quvvati 5 MVt yoki undan ortiq bo'lgan elektr energiyasi iste'molchilarining energiya qabul qiluvchi uskunalari iste'mol yuklamasi o'zgarishini va ushbu dispetcherlik markazining operatsion hududidagi elektr energetikasi qurilmalarining texnologik rejimining boshqa parametrlarini boshqaruvi markazlashtirilgan obektlarga kiritadi.

Shamol va quyosh elektr stansiyalarining energetik uskunalari nisbatan qo'llanilganda, boshqaruvi markazlashtirilgan obektlarga yagona elektr energetikasi tizimi tarkibida o'zgarish tokning bitta o'zgartiruvchisi orqali yoki kuchlanishi 10 kV va undan yuqori bo'lgan bitta taqsimlash qurilmasiga ishlayotgan shamol energetikasi qurilmalari va quyosh fotoelektrik modullari guruhlari, shuningdek yagona elektr energetikasi tizimi tarkibida alohida faoliyat ko'rsatayotgan, o'rnatilgan generatsiya qiluvchi quvvati 5 MVt va undan ortiq bo'lgan shamol energetikasi qurilmalari va quyosh fotoelektrik modullari kiradi.

Elektr energetikasi obektlarining elektr uzatish liniyalari, asbob-uskunalari va qurilmalarini, dispetcherlik markazining operatsion hududidagi uskunalarning texnologik ishlash rejimining alohida parametrlarini boshqaruvi markazlashgan obektlar ro'yxatiga kiritilganligi to'g'risidagi ma'lumotlar, ular boshqarish usuli bo'yicha taqsimlangan holda tezkor-dispetcherlik boshqaruv sub'yekti tomonidan, yozma ravishda, tegishli elektr energetikasi sub'yektlari va elektr

energiyasi iste'molchilariga yetkaziladi. Tezkor-dispatcherlik boshqaruv sub'yekti, dispatcherlik markazlari tomonidan boshqarish (yuritish) usuli bo'yicha taqsimlangan boshqaruvi markazlashgan obektlar ro'yxati tuzilishini tashkil etadi. Dispatcherlik markazining operatsion hududidagi yagona elektr energetikasi tizimining elektr energetikasi rejimiga ta'sir qiluvchi va boshqa dispatcherlik markazining operatsion hududida joylashgan boshqaruvi markazlashgan obekt, ko'rsatilgan dispatcherlik markazlarini har birining boshqaruvi markazlashgan obektlari ro'yxatiga kiritilishi lozim.

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*Baratov L.S.
Tulakov J.T.
Jizzax Politexnika instituti
"Energetika" kafedrasi assistenti
Otamurodov S.B.
Jizzax Politexnika instituti "Energetika"
kafedrasi 442-21 E guruhi talabasi*

NOAN'ANAVIY QAYTA TIKLANADIGAN ENERGIYA MANBALARIGA ASOSLANGAN ENERGIYA

Annotatsiya. Energetika resursi deb – tabiiy yoki sun`iy faollashgan har qanday energiya manbaiga aytiladi. Tabiiy resurslarning tasniflaridan biri – bu turdagi resursning tugallanishi bo`lib, unga muvofiq energetika resurslarini tugallanadigan va tugallanmaydiganlarga bo`linadi.

Kalit so`zlar: Energiya resurslar, Suv energiyasi, termoelektr generatorlar, termoemission generatorlar.

*Baratov L.S.
assistant
Tulakov J.T.
assistant
"Energy" department
Jizzakh Polytechnic Institute
Otamurodov S.B.
student
442-21 group E
"Energy" department
Jizzakh Polytechnic Institute*

ENERGY BASED ON NON-CONVENTIONAL RENEWABLE ENERGY SOURCES

Abstract. Energy resource means any natural or artificially activated energy source. One of the classifications of natural resources is the completion of this type of resource, according to which energy resources are divided into renewable and non-renewable.

Key words: Energy resources, Water energy, thermoelectric generators, thermoemission generators.

O`z navbatida, tugallanadiganlar tiklanuvchi va tiklanmaydigan bo`lishi mumkin. Tiklanuvchilarga tabiat (yer, o`simliklar, hayvonlar va h.k.) tomonidan tiklanadigan rusurslar kiradi, tiklanmaydiganlarga – tabiat tomonidan bir necha

asrlar davomida to'plangan lekin, yangi geologik sharoitlarda hosil bo'lmaydigan resurslar (neft, ko'mir va boshqa yer osti zaxiralari) kiradi. Tugallanmaydiganlariga quyosh, shamol, kosmik, iqlimiy va suv resurslari kiradi.

Energiya resurslarining barcha turlaridan quyosh energiyasi muhim ahamiyatga ega. Energiya resurslarining barcha turlari quyosh energiyasini tabiiy o'zgartirish natijasidir. Ko'mir, neft, tabiiy gaz, torf, yonuvchi tog' jinslari va o'tinlar – bu o'simliklar tomonidan olingan va o'zgartirilgan quyoshning nurli energiyasi zaxiralari. Surat sintezi (fotosintez) reaksiyasi jarayonida atrof-muhitning noorganik elementlaridan, ya'ni, suv (H₂O) va karbonot angidrit gazi SO₂ lardan quyosh nuri ta'sirida o'simliklarda asosiy elementi uglerod (S) bo'lgan organik modda hosil bo'ladi.

Suv energiyasi ham suvni bug'lantiradigan va bug'ni atmosferaning yuqori qatlamlariga ko'taradigan quyosh energiyasi hisobiga hosil bo'ladi.

Shamol, quyosh tomonidan bizning sayyoramizni turli nuqtalarini turli harorat hisobiga isitish natijasida hosil bo'ladi, ya'ni issiq va sovuq havo qatlamining siqilishi evaziga sodir bo'ladi. Bundan tashqari quyoshning yer sathiga to'g'ri keladigan bevosita nurlantirishi, katta energiya imkoniyatiga egadir.

Bizning iqlim sharoitimizda quyosh energiyasidan ko'proq foydalanish maqsadga muvofiqdir. SHu maqsadda quyosh energiyasidan foydalanish bo'yicha ilmiy tadqiqotlar olib borilmoqda. Muntazam takrorlanuvchi energiya manbalariga asosan ishlatilgan energiya o'rnini tabiiy ravishda qayta (takroran) to'ldirib boradigan energiya hosil bo'lish jarayonini ta'minlovchi tabiat resurslari kiradi. Masalan, suv, quyosh, shamol energiyalari va boshqalar. Suyultirilgan kompostdan ajralib chikuvchi gaz ham muntazam takrorlanuvchi energiya manbasi bo'lishi mumkin. Go'zaning poyasi ham muntazam takrorlanuvchi energiya resursi bo'la oladi. Har yili yangi ekilgan o'simlikdan poyani olish imkoni bor. Ammo bu energetik resursni xam oxirgi vaktlarda kurilish materiallari va kogoz tayyorlash uchun dalalardan yigib olinmokda.

Muntazam takrorlanuvchi energiya zaxiralarning afzalliklaridan biri va asosiysi ularning ekologiyaga zararli ta'sirining kamligidir. Bu energetik resurslar qayta tiklanishi bilan tavsiflanadi.

Ko'mir, neft va tabiiy gaz zaxiralari chegaralangan bo'lib, sarflangan zaxiraning o'rnini qoplanmaydi. Chunki yer osti yoqlarilgi zaxiralari millionlab yillar davomida o'tgan evolyutsion jarayon ta'sirida hosil bulgandir. Shuning uchun xam bu zaxiralarni tejab ishlatish zarur.

Muntazam takrorlanuvchi energiya manbalarini doimo tabiatning o'zi hosil qilib turadi. Faqat ulardan samarali foydalanishni tashkil etish zarur.

Hozirgi vaqtda issiqlikni to'g'ridan-to'g'ri, harakatlanuvchi mexanik detallarni qo'llamasdan, elektr energiyasiga aylantiruvchi qurilmalar tadqiq qilinmoqda.

Elektr energiyasi hosil qilishning quyidagi zamonaviy usullari mavjud:

- energiyani magnit gidrodinamikli o'zgartgichlar (o'zgaras magnitlar orasidan zaryadli zarrachalarni katta tezlikda oqib o'tishi natijasida elektr energiyasini hosil qilishga asoslangan);

- termoelektr generatorlar (1921 yilda kashf etilgan Zeebek samarasiga asoslanib, ya'ni bir uchlari issik kavsharlangan, ochiq qolgan uchlarida esa harorat ta'sirida E.Yu.K. hosil qiladigan turli xil metallardan tayyorlangan juftlikka asoslangan);

- radioizotopli energiya manbalari (yadro yemirilishida zarrachalar va kvantlarning kinetik energiyasi ajralishi bilan kechadi va bu harorat muxitga yutiladi hamda bu muxitni qizdiradi. Mazkur qizishni termoelektrik yo'l bilan elektr energiyasi hosil qilishda ishlatiladi);

- termoemission generatorlar (ushbu xodisaga 1883 yilda T.Edison asos solgan bo'lib, anod va katodlardagi harorat uzgarishi natijasida elektr energiyasi hosil qilishga asoslangan);

- elektrokimyoviy generatorlar (kimyoviy energiyani tugridan-tugri elektr energiyasiga aylantiruvchi kurilma);

- geotermal elektr stansiyalari (bu stansiyalar energiya manbai sifatida Yer qa'ridagi issiqlikni ishlatadi);

- muntazam takrorlanuvchi dengiz zaxiralariidan foydalanish. Dengiz zaxiralari uchga bo'linadi: 1) vertikal termogradyentlar va okean shamollari; 2) dengiz biomassalari va geotermal suvlar; 3) yuzadagi to'lqinlar va oqimlar. Eng katta energiya vertikal termogradyent ta'sirida, ya'ni suv satxidagi va tik o'q bo'yicha dengiz quvuridagi haroratlar farqi xisobiga suyuq ammiakni xarakatlantirib, turbina o'qini aylantirib elektr energiyasi ishlab chiqarishga asoslangan;

- quyosh elektr stansiyalari;

- termoyadro reaksiyasi va reaktor-ko'paytirgichlarning energiyasidan foydalanish va boshqa usullar kiradi. Energoresurslar bu insonlar o'z manfaati uchun foydalanishi mumkin bo'lgan energiya manbalaridir.

Ayni damda resurslarni tejash va ulardan oqilona foydalanish kun tartibining dolzarb masalalaridan biri hisoblanadi. Shuning uchun muqobil energiyadan foydalanish to'g'ri qaror hisoblanadi. AQSH va yevropa davlatlarida quyosh energiyasidan foydalangan holda suv isitish texnologiyasi uzoq vaqtdan beri qo'llanilmoqda.

Yevropa Ittifoqi davlatlarida quyosh energiyasidan foydalanish hajmi sezilarli darajada jadallashdi. Ayniqsa, iqlimi birmuncha issiq bo'lgan mamlakatlarda, xususan, Germaniya, Belgiya, Gretsiya, Italiya, Ispaniyada bu sohada ma'lum darajada tajriba ham to'plangan. Shuningdek, Xitoy, Turkiya, Lyuksemburg va Daniya kabi davlatlarda ham bu masalaga alohida e'tibor qaratilyapdi. Isroilda esa quyosh energiyasidan oqilona foydalaniladi. Mamlakatning istalgan hududidagi uylar tomilarida o'rnatilgan suv isitgichlari bunga yaqqol misoldir. Bunday maishiy ehtiyojdagi qurilmalar 150 litr sig'imga ega bo'lib, quyosh batareyasidan energiya olib, suvni isitadi. Shu tarzda bunday

qurilma sohibi yiliga taxminan 2000 kVt/soat elektr energiyasini tejash imkoniga ega bo'ladi.

Respublikamizdagi qayta tiklanadigan energiya manbasining imkoniyatlari 1.2-jadvalda ko'rsatilgan.

Ko'rsatkichlar	Jami (mln.t.n.e.)	Shu jumladan, energiya (mln.t.n.e.)			
		Gidro	Quyosh	Shamol	Biomassa
Yalpi ¹	50984,6	9,2	50973	2,2	–
Texnik ²	179	1,8	176,8	0,4	0,3
O'zlashtirilgan	0,6	0,6	–	–	–

1 –belgilangan hududga tushadigan yoki hosil qilinadigan nazariy energiya miqdori.
2– yalpi imkoniyatlarni amalga oshirib, foydalanish mumkin bo'lgan mavjud texnologiyaning bir qismi.

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*Baratov L.S.
Tulakov J.T.
Jizzax Politexnika instituti
"Energetika" kafedrasi assistenti
Rahmonov M.Z.
Jizzax Politexnika instituti "Energetika"
kafedrasi 401-23 EE guruhi talabasi*

BOSH PASAYTIRUVCHI PODSTANSIYANING O'RNINI TOPISH. ELEKTR YUKLAMALAR KARTOGRAMMASI

Annotatsiya. Sanoat korxonalarining bosh pasaytiruvchi podstansiyalarida, elektr energetikasi tizimidan uzatilgan yuqori kuchlanishli (35, 110, 220 kV) elektr energiyasini 6 yoki 10 kV li kuchlanishga pasaytiradi. BPP ning o'rnatish joyini to'g'ri tanlash, sanoat korxonasining elektr ta'minoti tizimini optimal loyihalashdagi asosiy masalalaridan biri hisoblanadi.

Kalit so'zlar: Elektr yuklamalar kartogrammasi, Aktiv yuklamalarning ta'minoti, sexning umumiy hisobiy aktiv yuklamasi.

*Baratov L.S.
assistant
Tulakov J.T.
assistant
"Energy" department
Jizzakh Polytechnic Institute
Rahmonov M.Z.
student
group 401-23 EE
"Energy" department
Jizzakh Polytechnic Institute*

LOCATION OF THE HEAD REDUCTION SUBSTATION. CARTOGRAM OF ELECTRICAL LOADS

Abstract. Energy resource means any natural or artificially activated energy source. One of the classifications of natural resources is the completion of this type of resource, according to which energy resources are divided into renewable and non-renewable.

Key words: Energy resources, Water energy, thermoelectric generators, thermoemission generators.

Korxonaning elektr ta'minotini loyihalash jarayonida, uning bosh plani berilib, unda barcha sexlar va boshqa ob'ektlar ko'rsatilgan bo'ladi. Sexlarning

joylashish tartibi, korxonaning texnologik jarayonidan kelib chiqadi. Planda sex va boshqa ob'ektlardagi qurilmalarning o'rnatilgan quvvatlari ko'rsatiladi. Bulardan tashqari ayrim sex va korxonaning aktiv va reaktiv quvvatlarining yozgi va qishki fasllariga tegishli bo'lgan xarakterli kunlik grafiklari beriladi.

Korxonaning BPP sining joylashish o'rinlarini to'g'ri tanlash, elektr ta'minoti tizimiga ketadigan sarf-xarajatlarni kamaytiradi. BPP ni joylashish o'rnini to'g'ri tanlash uchun, korxonaning bosh planiga elektr yuklamalar kartogrammasi chiziladi.

Elektr yuklamalar kartogrammasi deb, har bir ob'ekt va sex maydonlarida chizilgan doiralar tushuniladi. Ularning markazlari sifatida, ob'ekt va sex bosh planlarining markazlari olinadi. Chizilgan doiralarning yuzalari, olingan masshtab bo'yicha sex yuklamalariga teng bo'ladi. Sex yoki korxonalar yuklamalarining markazlari, elektr energiyasini qabul qiluvchi iste'molchilarning simvolik markazi hisoblanadi. BPP va sex podstansiyalarini imkoniyat chegarasida ushbu markazga joylashtirish kerak. Bu esa, yuqori kuchlanishli elektr energiyasini iste'molchilarga yaqinlashtiradi, yuqori va past kuchlanishli tarqatuvchi elektr tarmoqlarining uzunligini qisqartiradi, sarflanadigan o'tkazgichlar uzunliklarini kamaytiradi va elektr energiyasini nobudgarchiligini kamayishiga olib keladi. Bulardan tashqari, elektr yuklamalar kartogrammasi asosida elektr yuklamalarni korxonalar hududida qanday taqsimlanganligini tasavvur qilish imkoniyati yaratiladi (*2-rasm*).

Elektr yuklamalar kartogrammasini aktiv va reaktiv yuklamalar uchun alohida-alohida qurish maqsadga muvofiqdir. Chunki aktiv va reaktiv quvvat iste'molchilarning korxonalar maydoni bo'yicha joylashishlari har xil bo'lib, ular ayrim-ayrim manbalarga ulanishlari mumkin.

Elektr yuklamalar kartogrammasi doiralarning radiuslari quyidagi formulalardan aniqlanadi:

$$r_{ai} = \sqrt{P_{hi} / \pi m}; \quad r_{ri} = \sqrt{Q_{hi} / \pi m},$$

bu yerda, P_{hi} ; Q_{hi} - i - chi sexning hisobiy aktiv va reaktiv quvvatlari;
 m - doira yuzini aniqlash uchun, tanlangan mashtab.

Aktiv yuklamalarning ta'minoti elektr tizimi tomonidan bajarilsa, reaktiv quvvat manbasi sifatida maxsus kondensator batareyalar, sinxron kompensatorlar va reaktiv quvvatning ventilli statik manbalarini ishlatish mumkin. Reaktiv quvvat manbalarini o'rnatish joyi, reaktiv quvvat kartogrammasi asosida yuklamalarning simvolik markazini aniqlash natijasida topiladi. Reaktiv quvvat kompensatorlari o'rinlarini noto'g'ri tanlash, reaktiv quvvat oqimlarini elektr ta'minoti tizimi elementlaridan keraksiz harakatlariga olib keladi va elektr energiyasining qo'shimcha nobudgarchiliklariga sabab bo'ladi.

Elektr yuklamalar kartogrammasining har bir doirasini sektorlarga ajratish mumkin. Bu sektorlarning yuzalari mos ravishda yuqori va past kuchlanishli, hamda yoritish yuklamalariga proporsional bo'ladi. Agar biror sexda yuqori va

past kuchlanishli iste'molchilar, shu bilan bir qatorda yoritish qurilmalari mavjud bo'lsa, hisobiy quvvat uch tashkil etuvchilardan iborat bo'ladi, ya'ni:

$$P_h = P_{yu.k} + P_{pk} + P_{yor} \quad (kVt),$$

bu yerda, P_h - sexning umumiy hisobiy aktiv yuklamasi, (kVt);

$P_{yu.k}$ - sexdagi yuqori kuchlanishli iste'molchilarning hisobiy quvvati, (kVt);

P_{pk} - past kuchlanishli iste'molchilarning hisobiy quvvati, (kVt);

P_{yor} - yoritish qurilmalarining hisobiy yuklamasi, (kVt).

Sektorlarning markaziy burchaklari quyidagicha aniqlanadi.

$$\alpha_1 = \frac{P_{yu.k} \cdot 360^0}{P_h}; \quad \alpha_2 = \frac{P_{yor} \cdot 360^0}{P_h}.$$

Elektr yuklamalar kartogrammasini qurishda, doiralarning markazlari sex shakllarining geometrik markazlariga joylashtiriladi. Qurilgan elektr yuklamalar kartogrammasi asosida, korxonalar yuklamalarining shartli markazi (YuShM) aniqlanadi. Sex yuklamalarining yuzasi, uning yuzasi bo'yicha tekis taqsimlangan deb faraz qilinsa, YuShM sex geometrik shaklining markazida deb qabul qilinadi. Korxonaning YuShM aniqlashda quyidagi formuladan foydalaniladi:

$$X_0 = \frac{\sum_{i=1}^n P_i x_i}{\sum_{i=1}^n P_i} \quad (sm), \quad Y_0 = \frac{\sum_{i=1}^n P_i y_i}{\sum_{i=1}^n P_i} \quad (sm),$$

bu yerda, P_i ; x_i ; y_i - i - chi sexning hisobiy aktiv quvvati va uning geometrik markazining koordinatlari hisoblanadi.

Agar har xil sabablarga (texnologik, arxitekturaviy, ekologik v h.k) ko'ra, BPP ni korxonaning YuShM aniqlangan nuqtada o'rnatishning iloji bo'lmasa, uni tashqi elektr manbasi tomonga siljitish tasviya etiladi.

Agar korxonalar sexlariga, elektr energiyasini tizimdan markaziy tarqatish punkti (MTP) orqali uzatiladigan bo'lsa, uni o'rnatish joyini aniqlashda YuShM ni hisoblash shart emas. MTP o'rnini tanlanganda elektr energiyasini teskari tomoniga uzatilishiga yo'l qo'ymaslik kerak. Bunday talab bajarilganda o'tkazgich materiallari tejaladi va elektr energiyasini nobudgarchiligi kamayadi.

Sex transformator podstansiyalarini iloji boricha iste'molchilar guruhiga yaqin joylashtirish zarur. Bundan tashqari podstansiyaning o'rnini tanlanganda, ishlab chiqarish binosining shaklini, texnologik qurilmalarini joylashishini, sovitish sharoitlarini, yong'indan xavfsizligini va ishlatiladigan elektr jihozlarining turlarini hisobga olish kerak bo'ladi. Ko'p hollarda, podstansiyalar sex ichida, sex binosiga ichki yoki tashqi tomonidan birlashtirilgan tarzda quriladi. Sanoat korxonalari elektr ta'minotida komplekt transformator podstansiyalari (KTP) keng ishlatiladi. Bunday KTP lar zavod tomonidan to'la yig'ilgan holatda keltiriladi. Ular transformatorlar va komplekt taqsimlash qurilmalaridan (KTQ) tashkil topgan bo'lib, manzilga etkazish oson, kam joyni egallaydi, hamda ta'mirlash ishlarini tezkorlik bilan bajarish mumkin.

Misol tariqasida, Sement ombori uchun elektr yuklamalar kartogrammasini quramiz. Bunda, $m=10$ (kVt/sm²) ga teng deb qabul qilamiz.

Elektr yuklamalar kartogrammasini aktiv yuklamalar uchun quramiz va doira radiusini 2 chi jadval ma'lumotlari asosida aniqlaymiz.

$$r_{ai} = \sqrt{\frac{\sum P_h}{\pi \cdot m}} = \sqrt{\frac{P_h + P_{h,yor}}{\pi \cdot m}} = \sqrt{\frac{45 + 33,1}{3,14 \cdot 10}} = 1,6 \quad (sm).$$

Sex yoritishi uchun ketadigan quvvat sektorini aniqlaymiz:

$$\alpha_{yor} = \frac{P_{h,yor} \cdot 360^0}{\sum P_h} = \frac{33,1 \cdot 360^0}{45 + 33,1} = 152,6^0 \quad (grad).$$

Xuddi shu tartibda, qolgan sexlar uchun doira radiusi va quvvatlar sektorini aniqlab, natijalarini 4-jadvalga kiritamiz.

Yuklamalarning shartli markazini (YuShM) aniqlaymiz. YuShM ni aniqlash uchun, har bir sexni X va Y o'qidagi ko'rsatkichlarini $\sum P_h$ ga ko'paytirib, natijalarini 4 chi jadvalga kiritamiz va ularning summasini aniqlaymiz (masalan, *Sement omborida* $x_1=2,5$ (sm) va $y_1=3,5$ (sm) ga teng).

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*Baratov L.S.
Jizzax politexnika instituti
"Energetika" kafedrasi assistenti*

**KORXONALARINING SAMARADORLIK KO'RSATKICHINI
OSHIRISH MAQSADIDA ELEKTR YUKLAMALARI
KARTOGRAMMASINI QURISH VA BPP NING O'RNATILISH JOYINI
ANIQLASH**

Annotatsiya. Ushbu maqolada zavodning elektr energiyaga bo'lgan ehtiyojidan kelib chiqqan holatda elektr energiya isrofini kamaytirish hamda samaradorlik ko'rsatkichini yaxshilash maqsadida elektr yuklamalari kartogrammasi qurilgan va bosh pasaytuvchi podstansiyaning o'rnatilish joyini aniqlangan.

Kalit so'zlar: aktiv quvvat, reaktiv quvvat, elektr yuklamalar kartogrammasi, bosh pasaytiruvchi podstansiya.

*Baratov L.S.
assistant
"Energy" department
Jizzakh Polytechnic Institute*

**FOR THE PURPOSE OF INCREASE, THE EFFICIENCY INDEX OF
THE ENTERPRISES, CONSTRUCTION OF ELECTRIC LOAD
CARTOGRAM AND DETERMINATION OF THE PLACE OF BPP
INSTALLATION**

Abstract. In this paper, a mapping of electrical loads has been constructed and the location of the main step-down substation has been identified in order to reduce energy losses and improve efficiency of the plant's in terms of needed electricity.

Key words: active power, reactive power, electrical load cartogram, main step-down substation.

BPP joylanish o'rnini tanlash uchun korxonada bosh planiga yuklamalar kartogrammasi chiziladi. Kartogramma deganda har bir sex, ob'ektlar maydonlarida chizilgan doiralar tushuniladi. Ularning markazlari qilib ob'ektlar, sexlar planlarining markazlari olinadi. Chizilgan doiralarning yuzalari, olingan masshtabda, sex yuklamalariga teng bo'ladi. Sex yoki korxonada yuklamalarining markazlari elektr energiya qabul qiluvchilarning simbolik markazi hisoblanadi. BPP va sex podstansiyalarini imkoniyat boriga ushbu markazga joylashtirish kerak. Bu esa yuqori kuchlanishli elektr energiyasini iste'molchilarga yaqinlashtiradi, yukqori va past kuchlanishli tarqatuvchi elektr tarmoqlarining

uzunligini qisqartiradi, sarflanadigan o'tkazgichlar uzunliklarini kamaytiradi va elektr energiyasini nobudgarchiligini ozayishiga olib keladi. Bulardan tashqari kartogrammasi asosida elektr yuklamalarni korxonada hududida qanday taqsimlanganligini tassavvur qilish imkoniyati yaratiladi [1-8].

Kartogrammani aktiv va reaktiv yuklamalar uchun alohida-alohida qurish maqsadga muvofiqdir. Chunki aktiv va reaktiv quvvat iste'molchilarning korxonada maydoni bo'yicha joylashishlari har xil bo'lib, ular ayrim-ayrim manbalarga ulanishlari mumkin [9,10].

Kartogramma doiralarning radiuslari quyidagi formulalardan aniqlanadi [11,12]:

$$r_{ia} = \sqrt{P_{xi}/\pi m}; r_{ip} = \sqrt{Q_{xi}/\pi m};$$

Bu yerda, P_{xi} - i -sexning hisobiy aktiv quvvati;

Q_{xi} - i -sexning xisobiy reaktiv quvvati;

m - doira yuzini aniqlash uchun mashtab.

Aktiv yuklamalarning ta'minoti elektr sistemasidan bajarilsa, reaktiv quvvat man'basi sifatida mahsus kondensator batareyalarini, sinxron kompensatorlarni, reaktiv quvvatning ventilli statik manbalarini ishlatilishi mumkin. Reaktiv quvvat manbalarini o'rnatish joyi reaktiv quvvat kartogrammasi asosida yuklamalarning simvolik markazini aniqlash natijasida topiladi. Reaktiv quvvat kompensatorlari o'rinlarini noto'g'ri tanlash reaktiv quvvat oqimlarini elektr ta'minoti tizimi elementlaridan keraksiz xarakteriga olib keladi va elektroenergiyaning qo'shimcha nobudgarchiliklariga sabab bo'ladi [13].

Bosh pasaytiruvchi podstansiya (BPP) - bu korxonada elektr ta'minotini amalga oshirishga mo'ljallangan bosh transformator podstansiyasidir. BPP dan barcha sex transformator podstansiyalari ta'minlanadi. Uning o'rnatish joyi yuklamalarning og'irlik markaziga to'g'ri keladi, ya'ni BPP katta quvvatli iste'molchilar hududida joylashadi [14-18].

Har bir sex koordinata qiymatlari va hisobiy yuklamalari yordamida korxonaning elektr yuklamalar markazi aniqlanadi:

$$x_0 = \frac{\sum_{i=1}^n P_i x_i}{\sum_{i=1}^n P_i}; y_0 = \frac{\sum_{i=1}^n P_i y_i}{\sum_{i=1}^n P_i};$$

bu yerda: P_i ; X_i ; Y_i - i -chi sexning hisobiy aktiv quvvati va uning geometrik markazining koordinatlari.

X_0 va Y_0 koordinata qiymatlar orqali korxonaning shartli elektr yuklamalar markazi aniqlanib, bosh planda ko'rsatib o'tiladi.

BPP o'rnatiladigan elektr yuklamalar markazi har doim ham hisob orqali aniqlangan nuqtada belgilanmaydi. Uni o'rnatish quyidagi faktorlar asosida amalga oshiriladi:

- BPPga yuqori kuchlanish tomondan keladigan havo liniyasini ishchilar harakati taqiqlangan yoki kam qatnov hududlardan olib o'tish zarur;

• BPPni imkon qadar katta quvvatli iste'molchilarga yaqinroq qilib joylashtirish kerak.

Hisob yordamida aniqlangan yuklamalar markazi yuqoridagi ikkita talabga javob bersagina, bu markaz korxonaning haqiqiy yuklama markazi hisoblanadi.

Elektr yuklamalar kartogrammasi bu – korxonada bosh planida yuklamalarning qanday taqsimlanganligini tasavvur qilish maqsadida sex quvvatiga bog'liq ravishda aniqlangan radius asosida chizilgan doiradir. Doira sex yuklamalarining katta kichikligini ifodalaydi [15].

Nazariy qismda berilgan ifodalar yordamida berilgan jadvaldagi iste'molchilar zavod hududida joylashgan mavjud sexlar. Ularning koordinata qiymatlari va hisobiy yuklamalari yordamida korxonaning elektr yuklamalar markazi aniqlanadi [16,17]:

№	Zavoddagi sexlar	X	Y	P _h , kVt
1	1chi sex	19,5	7	400
2	2chi sex	19,5	10,3	650
3	3chi sex	5	10,7	1500
4	4chi sex	9,5	17,9	250

$$x_0 = \frac{\sum_{i=1}^n P_i x_i}{\sum_{i=1}^n P_i} = \frac{400 \cdot 19,5 + 650 \cdot 19,5 + 1500 \cdot 5 + 250 \cdot 9,5}{400 + 650 + 1500 + 250} = 10,84$$

$$y_0 = \frac{\sum_{i=1}^n P_i y_i}{\sum_{i=1}^n P_i} = \frac{400 \cdot 7 + 650 \cdot 10,3 + 1500 \cdot 10,7 + 250 \cdot 17,9}{400 + 650 + 1500 + 250} = 10,72$$

Nazariy qismda berilgan ifodalar yordamida 1chi sex uchun elektr yuklamalar kartogrammasi aniqlaymiz [2,3]: $P_{\Sigma h} = 400$ kVt, $P_{h,yo} = 30$ kVt.

$$r_1 = \sqrt{\frac{\sum P_x}{\pi \cdot m}} = \sqrt{\frac{400}{3,14 \cdot 3}} = \sqrt{\frac{400}{9,42}} = 6,52 \text{ m}$$

m=3 deb qabul qilamiz.

$$\alpha = \frac{P_{h,yo} \cdot 360^0}{P_{h\Sigma}} = \frac{30}{400} \cdot 360 = 27^0$$

2chi sex uchun elektr yuklamalar kartogrammasi aniqlaymiz: $P_{\Sigma h} = 650$ kVt, $P_{h,yo} = 50$ kVt.

$$r_1 = \sqrt{\frac{\sum P_x}{\pi \cdot m}} = \sqrt{\frac{650}{3,14 \cdot 3}} = \sqrt{\frac{650}{9,42}} = 8,3 \text{ m}$$

m=3 deb qabul qilamiz [4,5,6].

$$\alpha = \frac{P_{h,yo} \cdot 360^0}{P_{h\Sigma}} = \frac{50}{650} * 360 = 28^0$$

3chi sex uchun elektr yuklamalar

kartogrammasi aniqlaymiz [18]:

$$P_{\Sigma h}=1500 \text{ kVt}, P_{h,yo}=80 \text{ kVt}.$$

$$r_1 = \sqrt{\frac{\sum P_x}{\pi * m}} = \sqrt{\frac{1500}{3,14 * 3}} = \sqrt{\frac{1500}{9,42}} = 12,6 \text{ m}$$

m=3 deb qabul qilamiz.

$$\alpha = \frac{P_{h,yo} \cdot 360^0}{P_{h\Sigma}} = \frac{80}{1500} * 360 = 19^0$$

4chi sex uchun elektr yuklamalar kartogrammasi aniqlaymiz: $P_{\Sigma h}=250 \text{ kVt}$, $P_{h,yo}=35 \text{ kVt}$.

$$r_1 = \sqrt{\frac{\sum P_x}{\pi * m}} = \sqrt{\frac{250}{3,14 * 3}} = \sqrt{\frac{250}{9,42}} = 5,2 \text{ m}$$

m=3 deb qabul qilamiz.

$$\alpha = \frac{P_{h,yo} \cdot 360^0}{P_{h\Sigma}} = \frac{35}{250} * 360 = 28^0$$

Taxlil va natijalar asosida shuni aytish joizki, zavodning x o'qda $x_o=10,84$ y o'qda $y_o=10,72$ kelib chiqdi. Bu natija korxonaning BPP ning o'rnatilish o'rnini belgilaydi. Yuklamalar kartogrammasi 1-sex uchun $\alpha=27^0$, 2-sex uchun $\alpha=28^0$, 3-sex uchun $\alpha=19^0$, 4-sex uchun $\alpha=28^0$ hosil bo'ldi.

Foydalanilgan adabiyotlar.

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*Berdikulova M.G.
2-kurs talabasi
"Musiqqa ta'limi" yo'nalishi
Navoiy Davlat Pedagogika instituti
Ilmiy rahbar: Bo'ronov F.T.*

MUSIQIY MASHG'ULOTLAR JARAYONIDA MUSIQA TINGLASH QOBILIYATLARINI RIVOJLANTIRISH

Annotatsiya. Ushbu maqolada musiqqa o'qitishning asosiy maqsadi, yosh avlodning qalbida musiqaga mehr uyg'otish, musiqiy mashg'ulotlar orqali bolaning musiqiy qobiliyatlarini rivojlantirish haqida so'z boradi.

Kalit so'zlar: musiqqa, o'qituvchi, bilim, malaka, qobiliyat, rivoj, san'at, pedagogika, texnologiya, ijod.

*Berdikulova M.G.
2nd year student
"Music education" direction
Navoi State Pedagogical Institute
Research advisor: Boronov F.T.*

DEVELOPMENT OF MUSIC LISTENING SKILLS DURING MUSIC EDUCATION

Abstract. This article talks about the main goal of music education, instilling love for music in the hearts of the young generation, and developing the child's musical abilities through musical training.

Key words: music, teacher, knowledge, skills, ability, development, art, pedagogy, technology, creativity.

Yosh avlodni har tomonlama yetuk qilib tarbiyalashda maktabda o'qitiladigan barcha fanlar qatori nafosat tarbiyasining tarkibiy qismi bo'lgan musiqqa madaniyati darslarini ahamiyati katta. Musiqqa inson his-tuyg'ularini, orzu-istaklarini o'ziga xos badiiy tilda ifoda etadi va bolaning hissiyotlariga faol ta'sir ko'rsatadi. Musiqqa fani maktabda boshqa fanlarni o'zlashtirishga ham bevosita ta'sir ko'rsatadi. Musiqqa jonli san'at turi sifatida davr, hayot, tabiat va inson his-tuyg'ularini, orzu-istaklarini aks ettiradi. Uni quvontiradi, o'ylantiradi va hayotdan ozuqa olishga xizmat qiladi. Milliy madaniyatimiz bobokaloni Abu Nasr Forobiy aytganlaridek, «Bu fan tana sog'ligiga foydalidir».

Maktabda musiqqa o'qitishning asosiy maqsadi o'quvchilarda musiqqa madaniyatini shakllantirish, ularni zamon talabiga javob bera oladigan barkamol inson qilib voyaga yetkazishdir.

Bolaning ijod doirasining keng doirasi bor. Bu bolaning tasavvurini faollashtiradi, mustaqil qo'yilgan maqsadga erishishni rag'batlantiradi, o'z g'oyalarini turli shakllarda amalga oshirishini izlaydi va o'rganishga yordam beradi. Musiqiy o'yin va mashg'ulotlar bolalarning uch yoshdan yetti yoshgacha tavsiya etiladi. Ritmik harakatlar bolalar bog'chasida boshlang'ich guruhlarda va musiqa maktablarida, uy sharoitida yanada chuqurroq o'rganilishi mumkin. Bolalarning aqliy, nafosat va jismoniy rivojida raqs, musiqali o'yinlar va musiqaga mos harakatlar bajarish quyidagi vazifalardan iborat:

- Bolalarning musiqiy uquvi, ayniqsa xotirasi, ritm tuyg'usi musiqaga mos harakatlar yordamida yaxshi rivojlanadi. Har qanday harakat turi musiqiy asarning sur'ati va ritmi ostida bajariladi, harakat bilan bog'liq bo'lgan musiqiy ohanglar bola xotirasida turg'un saqlanadi. Raqs va musiqiy harakatlar bolada harakatchanlik, chaqqonlikni rivojlantirib, qomatning tog'ri o'sishiga va badanning chiniqishga katta yordam beradi. Musiqiy asarlar bolalarga turlicha emotsional hislar uyg'otib, turlicha kayfiyatlar hosil etib, ularning ongida o'ziga xos obrazlar yaratadiki, bolalar asar mazmunini turli harakatlar va ishoralar bilan ifodalashga harakat qiladilar. Demak, musiqaga mos harakatlar o'quvchilarning aqliy va nafosat qobiliyati rivojlantirish bilan birgalikda irodasini ham rivojlantiradi.

Musiqiy asarlardan marsh, raqs va o'yinlar o'quvchilarga tez ta'sir etadi, shuning uchun ham quvnoq raqs, qiziqarli musiqali o'yinlar har bir bolaning e'tiborini o'ziga tortadi. Ritmika bolalarda musiqiy harakatlarni, estetik tarbiyani oshirishda katta rol o'ynaydi. Bog'cha yoshidagi bolalar ilk yoshdan boshlab sakraydi, o'ynaydi, lekin bu bolaning ritmik harakatlandi, degani emas. Bu davrda bolalar musiqa ostida emotsional harakatlanadi, eshitish qobiliyati o'sadi.

Musiqa ostida harakatlanib, tarbiyachilar bilan birgalikda kichik-kichik qo'shiqlar ham kuylanadi.

Harakat turlari uchga bo'linadi:

1. Asosiy harakatlar: yurish, yugurish, sakrash.
2. Gimnastik harakatlar: predmetlar bilan, ya'ni lenta, obruch, bayroqchalar va koptok bilan.
3. Raqs harakatlari: musiqa ostida ritmik harakatlar haqida nazariy bilimga ega bo'lish mumkin.

Maktabda va bog'chada o'tkaziladigan har bir ertalikni, turli tadbirlarni musiqasiz tasavvur etib bo'lmaydi. Jumladan, musiqali ritmik harakatlarning ham o'z o'rnini bor. Bunda bola ritmni his qiladi, qomatlari chiroyli bo'lib, to'g'ri yurushni, musiqa ostida harakat qilishni o'rganib boradilar. Hozirgi milliy qadriyatlarimiz, urf-odatlarimiz, o'zbekchiligimiz o'z o'rnini topayotgan bir vaqtda bolalarga o'zbek milliy musiqasi, qo'shiqlari, ritm harakatlarini o'rganish juda muhimdir. Musiqiy- ritmik harakatlar orqali bola musiqani his qilishi hamda uni obrazli tushunishi mumkin.

Tavsiya etiladigan musiqa orqali bolalarning ruhiy holatini hamda atroflicha o'rganish mumkin. Izlanishlar shuni ko'rsatadiki, bolalarga tavsiya

etiladigan obrazli harakatli o'yinlar, obrazsizlaridan ancha samaraliroq. Shuningdek, musiqiy-ritmik harakatlarni o'zlashtirish davomida bola milliy musiqa sadolarini ham ajratishni, ularni farqlay olishni o'rganadi. Bolaga beriladigan musiqali ritmik harakatlarni amalga oshirish jarayonida bola uni idrok qiladi, tushunadi hamda musiqa va unga mos raqs harakatlarini amalga oshiradi. Bu orqali ularda musiqani tushunish ko'nikmalarini shakllantirish mumkin.

Qachonki, bola musiqani tushunsagina, unga mos raqs harakatlarini amalga oshira oladi. Bola amalga oshirayotgan har bir ritmik harakatni to'g'ri idrok qila olishi bu muhim jihatlardan biridir. Aytish kerakki, ritmik harakatlarning noo'rin qo'llanishi ham salbiy omillarga olib kelishi mumkin. Bolaga raqs harakatlarni tushuntirish asnosida uning hislarini ham tarbiyalash bevosita muhim jihat sanaladi. Agar ularda his-tuyg'ular ishlamas ekan, siz sahnalashtirgan musiqani tushunmasdan, ko'r-ko'rona amalga oshiradi.

To'g'rirog'i, musiqa rahbari ko'rsatgan narsadan nariga o'tmaydi. Shu sabab, eng avvalo, bolada his qilish tuyg'usini shakllantirish shart. Bolaga raqs harakatlarini o'rgatish jarayonida gohida siz o'zingiz bilmagan holda bolaning qobiliyatlarini payqay boshlaysiz. Hattoki u siz o'rgatayotgan harakatlarga yanada o'zidan qo'shimchalar qo'shishi mumkin. Bu esa umumiy kompozitsiyani boyitishga xizmat qiladi.

Musiqiy-ritmik harakatlar bolaning fiziologik va ruhiy rivojlanishiga qay darajada hissa qo'shishini yuqorida ko'rib chiqdik. Ammo, mana shu ritmik harakatlar aslida nimaga asoslanishini, uning manbalarini nima ekanligini bilib olish fursati yetdi. Har qanday musiqa ham albatta chiroyli harakatlar bilan yaxlitlik kasb etadi. Shunchaki, musiqa insonni zeriktirishi mumkin. Unga hamohang go'zal xiromlarni tomosha qilish esa estetik zavq bag'ishlaydi. Shunday musiqalar va ularga monand raqslar bo'ladiki, ularni bir-biridan ayro tasavvur etib bo'lmaydi. Musiqiy-ritmik harakatlarni amalga oshirayotganda bolalarning uni o'zlashtirish potentsiali bevosita musiqaning ruhiyatiga ham bog'liq.

Biroz sokinroq, mahzunroq musiqaga bolalar harakatlarni amalga oshirishga qiynaladi. Chunki bolaning tabiatidagi quvnoqlik bunga xalaqit beradi. Sho'x, quvnoq musiqaga raqsga tushishga bola qiynalmaydi. Aksincha yana o'zidan nimalarnidir qo'shimcha qilishi ham mumkin. Shunindek, musiqiy-ritmik harakatlarni o'zlashtirishda bolalar qo'shimcha mayda detallarga ham ehtiyoj sezishi tabiiy. Musiqaga mos holda bolaning qo'liga shiqildoq, doira yoki boshqa bir kichikroq shakldagi predmetlarni berish kerak. Bular ritmik harakatlarning musiqaga hamohangligini yanada kuchaytiradi. Kerak bo'lsa, raqs harakatlariga jilo baxsh etadi.

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Berdiyeva K.M.
docent
Termiz State Pedagogical Institute
Kholmirezayeva U.M.
2nd year master
Termiz State Pedagogical Institute

USE OF FOLK'S ORAL CREATION IN THE FORMATION OF ECOLOGICAL CULTURE IN 5-6-YEAR-OLD CHILDREN IN PRE- SCHOOL EDUCATIONAL ORGANIZATIONS

Annotation. This article presents examples of examples of folklore in the formation of environmental culture among 5-6-year-old children in preschool educational organizations.

Key words: ecological culture, folklore, fairy tales, riddles, proverbs.

One of the current global problems is the environmental situation. One of the main reasons for the breakdown of the relationship between nature and man is the lack of ecological knowledge, lack of common sense in the relationship with nature. As a result of this, there are problems that lead to the destruction of humanity. The lack of clean water and drinking water, air pollution, a sharp decrease in food supply to the population, and a sharp decrease in natural resources.

Nature is so fair that it balances the environment. As mankind harms nature, so it harms mankind. In recent years, the cruel treatment of nature has caused various disasters. It is in the hands of our humanity not to cause these disasters, to prevent them and to preserve nature.

Since ancient times, our people have been saying that food is the strength of the body and the strength of the mind is a wise word. Hadiths are such words of wisdom and masterpieces of wisdom. The famous Central Asian scholars who were engaged in the science of hadiths, Abu Abdullah, Muhammad ibn Ismail al-Bukhari, Abu Isa Muhammad ibn Isa at-Tirmizi and Abu Muhammad Abdullah ibn Abu ar-Rahman ad Darami al-Samarkandi, are great at preserving the science of hadith from century to century. are great historical figures who contributed. The role of Hadith clauses in inculcating ecological education and upbringing is incomparable.

According to the hadith, the rosary recited by each planted tree is recorded in the deeds of the person who planted that tree, and the reward of charity is written in the deeds of the person who planted the tree, or if others sit in its shade. Here it is appropriate to mention the following story. A king and his minister were walking through a village and saw an old man working in his garden. Despite his old age, the old man was hard at work planting tree saplings. The king liked the

old man's hard work. The king came to the old man and said to the minister, "Let's have a little talk with this old man."

The king said: "Don't listen, father, what are you doing? What are you planting on the ground?", he said.

The old man said: "Be safe, my king." I am planting a fruit tree"

The king said: "Father, will you be lucky enough to eat these fruits, after all, if you are old, these trees will bear fruit after many years?"

The old man replied: "I must not be lucky enough to eat these." The king said: "Then why are you working so hard to plant this tree?" "Are you planting a tree knowing that you will not taste the fruit?" he asked.

The old man said: "My king, our ancestors before us sowed, we ate. Now we will also plant and let those who follow us eat."

This answer pleased the king and he gave the old man a purse of gold. The old man took the gold and said: "Thank God that our tree has given fruit today."

The king liked this answer and gave the old man another purse of gold.

The old man said: "Praise be to Allah that all trees bear fruit once a year, but the tree I planted bore fruit twice."

The king wanted to give him another purse of gold. Then the minister immediately stopped and said: "Oh my king, if you don't leave here soon, the gold in your treasury will run out." Then the King continued on his way.

The old man was very happy and opened his hand in prayer: "O Lord, you are great, I will plant a tree for your approval without wasting my time."

Nature is an inexhaustible source of spiritual enrichment. To protect and truly love nature, you need to know it. Ignorance of nature is often the cause of indifference and sometimes cruelty towards all living beings. Sometimes a child can break a branch, hit a frog with a stick, trample a beetle, destroy an anthill, without even suspecting that this is causing great harm to nature.

Proverbs play an important role in child education. Many proverbs have an internal rhyme. For example: "aman" and "straw", "sultan" and "shepherd" are mutually harmonious, i.e. rhyming. In this respect they are like riddles. A proverb can also be in poetic form. For example: There is gold in the earth, you will find it if you give it to Qazi. There is silver in the garden. In other words, the more you cultivate the land and make it fertile, the more you will get a good harvest from it and your income will increase. Our people expressed this poetic saying that the fruits and vegetables in the garden are very useful for people. By using proverbs, you will increase not only the outlook of children, but also their vocabulary, we will encourage them to think logically.

In addition, there are different views in folk proverbs about protecting nature, loving it, and that people are a part of it, proud of it, and perfected in it. For example: If you look at nature, it looks good, and it wears gold. That is, if a person has a right attitude towards nature, if he makes good use of natural resources, nature will not deny him its blessings. There are several such proverbs:

Proverbs:

- If you are a farmer, plow, if you are a Mullah, repeat.
- El lives with earth, Earth lives with water.
- If you plow the land, plow in the fall, if you don't plow in the fall, plow the hundred.

Ecological culture includes not only the perception of the beauty of nature, but also active work to know it and protect it. They observe and discuss the rules of behavior with children, help them gain practical experience in caring for plants and animals.

In educating the youth of our society in the spirit of our national values, we must not forget that the tasks of education are wide and multifaceted. Therefore, it is necessary to imagine in advance the questions of what kind of person should be educated, what kind of person should be as a result of education. In this case, formation of national values in 5-6-year-old children through the use of examples of folk art is of great importance. It should be in line with society's goal of educating a perfect human being. National values, which are widely interpreted in folklore - humanity, tolerance, patriotism, hospitality, harmony, honesty, love of nature, etc. are considered to be the delicate buds of the values of the Uzbek people. Our people have been taking care of them for centuries.

The source of our country's strength is its loyalty to national values. National values, by their essence, are a system of ideas that express the main goals and objectives of our nation, connect its past and future, and serve to realize centuries-old dreams.

The content of pre-school education is rich in materials of national values. Many manuals include folk tales, proverbs, narrations, hadiths, epics, short stories, legends, riddles, folklore, folk tunes and songs. According to the essence of their content, they serve to form the foundations of national moral culture in young children. In order to purposefully and effectively use the means of folk art, the educators of the preschool educational organization should have high pedagogical skills.

The great pedagogues also gave the products of folk art to the youth during the course of the science classes that they taught. Through this, they enriched the spiritual heritage of young people. Based on the spiritual need of the time, Uzbek pedagogues H.H. Niyozzi, S. Ayniy, Abdulla Avloniy founded this work. They paid special attention to the materials of children's oral creativity in the books they created.

If today's education and ideology of independence is nourished by this heritage, if it accepts its best pages and rules, it can honorably fulfill its goals and tasks. Because it is a testimony to the comprehensive education and maturation of a person, the priority of our spirituality, and the appreciation of our precious values.

From the Islamic point of view, the education of nature protection is the duty of the older members of the society. Older people should set an example for young people to protect the environment and maintain cleanliness. We should

always remember the words of our grandfathers and grandmothers: don't spit in the water, don't throw garbage on the streets, don't sweep the garbage in the ditches, don't kill the growing plants, and teach them to the youth.

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Berdiyeva K.M.
docent
Termiz State Pedagogical Institut
Bozorov M.M.
graduate student
Termiz State Pedagogical Institut

BEFORE SCHOOL AGE THE CHILDREN METHODOLOGICAL GUIDELINES FOR THE USE OF INTERACTIVE METHODS IN INTRODUCING NATURE

Abstract. In this article, you can get enough information about the technology of using creative games in organizing the interactive educational process of preschool children.

Key words: preschool educational organization, educational process, creative games, making transactions, interactive games, green area, modern experiences, pedagogical technology, ecological education, nature games, innovative technology.

Current and emerging technological advances in information and communication technologies enable the development of interactive learning environments to support new ways of learning. Interactive learning environments have an increasing role in teaching and learning and may play an important role in the future. In particular, discovery, creativity encouraging and enhancer tools. thinking and to express very necessary Our research main point young students for complicated in the fields to learn support for Interactive education environments to design directed. We emphasize that children real life they learn and in the future real complicated problems solution to do are prepared, of the world complexity than usual according to much earlier and much earlier account taken need. In education developing trends more and more to the student directed approaches is passing In this learning the facts and the rules with passive to get acquainted not but self to encourage based on active discovery and participation reach to the process becomes Educator's role more coach or guidance as it will be seen in progress help will give and important role plays That's it point of view from the point of view than to learn children study activity with engaged in and dived without active respectively new dynamic that " builds " knowledge process as to look can Interactive education environments when designing our our approach constructive and instructive learning approaches in the middle right balance is storage. From this except, they that's it until now, for example, behaviorism computer using teaching and cognitive to psychology than less attention directed Children's complexity about concepts support for interactive study environment design. This of research from the goals one of children the environment sciences and ecology in the field concepts support for interactive

education environment is to create. Main guess from that is that the future in the century the environment problems more and more important and more complicated will be

Ecological of education again one important the question is this stability issues young students how our input is stable development goals United Nations The agenda of the organization until 2030 is many level education actions for, first in turn, the goals seeing exit through big leadership and inspiration will give. However, this in research of children stability for of education main element as nature games in the form of nature experience for opportunities attention is directed. Very young students for access and closeness the first hand experiences for very important aspects, mainly the game through. Ernst and Angle nature before school education institutions in learning stability for education conditions nature of games potential contribution they emphasized. And young students for stability indicators a lot Although we are in this in research nature to the games access and closeness idea through stability to work let's take it down.

It's a game children active respectively forming and pleasure and the selection own into received experience So so, nature games why take to come deeper seeing exit guaranteed. First, the idea of " nature ". quickly seeing exit Of nature wide and inclusive the idea of " ecosystem of processes most of them there is has been organic environment (eg birth, death, reproduction, species between relationships). This to the list desert from the regions farmer farms and to the gardens to live places spectrum enters ". This sure definition is useful mainly because it inhumane and heavy to the person has been external space spectrum cover takes this in research we nature city gardens basically not developed or uncontrollable parts as we use However, this research for more important thing this definition not but this places children for why have that it is places of nature physical and alive elements with how mutually effects provides. Children and nature of the network to work based on nature games imaginative, constructive, emotional and cooperative has been natural in the regions open in the air free of charge the game that is defined. From this besides, Natural Start organization nature games " sites ". stones, dirt, trees, insects, flowers, mud and water such as things with mutually effect to do for elementary nature provider as describes. Nature games sites are also this things manipulation to do possibility to give I need it, guys dig, collect, climb, build and Hide for free of charge to be need This research for nature games idea elements with mutually in touch to be possibility giving nature in places of children happy and himself himself manage experience unites Nature of the game definition recently conducted in research early of childhood nature with dependence to describe very looks like, for example, free selected personal selection in nature the body action, nature events study, places learning and free the game One different although not nature games and early of childhood nature with dependence between potential relationships important it seems

Children and nature network America Pediatrics Academy to the report based on nature the game of endurance important structural part as describes. Studies early childhood period nature experience by supported to himself special endurance factors is determined. An example for, nature children kindergarten settings young to the students roles discussion to do, cooperation to do, collective things perform and social skills development opportunities present reach with society develops. That's it similar in the environment of children durability support for green school yards role, WHO from stress avoid, focus development, competence formation and supportive social groups formation such as protection of factors development note did

Nature the game settings " loose parts " aspect children play, experience transfer, the problem solution to do and in hand natural materials with news to create with execution doer activity to develop possibility will give. From this except, the game children identity to build and autonomy and agency support help will give. Current of research main direction early childhood game though for natural to the environment effect to do big age children also for, for example, subjective and psychological prosperity for protection factor as described

Many studies green of the field importance relatively to nature rapprochement and endurance elements between dependence emphasized. For example, children vital to stress with a buffer against provide for near around to nature enter importance nature of children durability strengthens and to the children regularly access possible have to those who are not than difficulties better overcome for nature with more contact to do provides. Green to the field entry is 3-5 years old children for emotional endurance prophecy what he did determined. Natural neighborhood area from 4 to 6 years has been children for social, emotional and behavior difficulties decrease possible said to the conclusion came Recently conducted research childhood during and whole life during green of the field long time existence with depends the question seeing came out in studies health and demographic from the data used and green field nearby growth adulthood age spiritual health diseases 55 percent of the risk decrease with depends said to the conclusion came another known risk of factors effect burn manifestation being is standing

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Bobomuradova N.J.
Buxoro davlat universiteti
“Ekologiya va geografiya” kafedrası katta o‘qituvchisi

TEMURIY MALIKA AYOLLARNING MA’NAVİY-AXLOQIY FAZILATLARI

Annotatsiya. Mazkur maqolada Temuriylar salatanati davridagi ma’naviy-ma’rifiy hayot, insonlararo munosabat, ijtimoiy munosabatlar, hamda ayollarning davlat masalalariga bo‘lgan ta’sir darajalari masalalari yoritilgan.

Bobomuradova N.J.
senior teacher
"Ecology and Geography" department
Bukhara State University

SPIRITUAL AND MORAL QUALITIES OF TIMURID PRINCESSES

Abstract. This article covers issues of spiritual and educational life, interpersonal relationships, social relations, as well as the level of influence of women on public affairs during the reign of the Timurids.

Qadimdan Sharqning ayollari o‘zining go‘zalligi, donoligi, hayosi, ibosi bilan boshqa xalq ayollaridan tubdan ajralib turishgan. Ayniqsa, bu o‘rinda Temuriy malikalar alohida ahamiyatga ega. O‘tmishimizga nazar tashlanganda Temuriylar va Boburiylar saltanatlarida ayollarga ko‘rsatilgan izzat-hurmat va e‘tibor boshqa Sharq sulolarida kuzatilmaydi.

Temuriylar va Boburiylar sulolasidan oldingi sulolalarda biror ayol haqida ma’lumot olish uchun bir nechta kitobni varaqlash kerak bo‘lsa, birgina “Boburnoma”da 74 ta ayolning ismi 230 o‘rinda hurmat bilan keltirilgan.¹¹ Bundan ajdodlarimizni yuksak ma’naviyatli, keng dunyoqarash egalari bo‘lganliklarini bilish mumkin.

Chunki aynan ayollar, erkaklar urush safarlarida bo‘lgan paytlarida farzandlarga, shahzodalarga tarbiya berishgan va bunyodkorlik ishlariga boshchilik qilishgan.

Biz bu o‘rinda shunday Temuriy malikalardan ikki go‘zal xonim haqida so‘z yuritmoqchimiz. Ularning har biri tariximizda ulkan burilish yasab, o‘chmas iz qoldirishgan.

Bular: Amir Temurning suyuqli ayoli Saroymulxonim hamda Husayn Boyqaroning go‘zal xonimi Xadichabegimdir.

¹¹ Boburnoma Toshkent-2007

Dastlab Saroymulxonim haqida. Saroymulxonim Chig'atoy ulusiga mansub mo'g'ul xonlaridan Qozonxonning qizi bo'lib, 1341 yilda tug'ilganlar. 1355-yilda esa Movarounnahr hukmdori amir Qozog'onning nabirasi amir Husayn ularni nikohiga kiritgan. 1370 yildagi jangda Amir Temur Amir Husaynni yengib, uning haramidan 4 ayolni o'zi bilan olib qaytadi. Ular orasida Saroymulxonim ham bor edi.

Amir Temur Saroymulxonimni nikohiga olgach, "ko'ragon" unvonini oldi. Saroymulxonim haramda katta xonim ya'ni Bibixonim nomini olganlar. Albatta bunday unvon haramdagi eng oqila, didli hamda keng dunyoqarash egasiga berilardi. Bundan tashqari Saroymulxonim juda go'zal bo'lganlar.

Amir Temur harbiy yurishlarida Saroymulxonimni ko'pincha birga olib yurgan. Hatto saroyda vujudga kelgan muammolarni hal qilishda Saroymulxonim oqilona maslahatlarini ayamaganlar. Amir Temur Saroymulxonim maslahatlariga oshkora bo'lmasada, pinhona ravishda ehtiyoj sezib turgan.

Aytishlaricha Amir Temurga Isfaxon qamali uzoqqa cho'zilgani tufayli qo'shinni ta'minlashga mablag' yetmay qoladi. Shunda u Saroymulxonimga "Qo'shinning zahirasi tugadi, xazinadan zar yuboring",- deb xat yuboradi. Saroymulxonim esa "Zaringiz tugagan bo'lsa, siyosatingiz ham tugaydimu", degan kinoyali javob yuboradi. Amir Temur kinoyani tushunib, so'yib yeyilgan qo'y-mollar suyaklariga muhr urdirib, Isfaxon qamali tugaguncha ulardan pul o'rnida foydalanadi. Keyinchalik ular tanga pullarga almashtiriladi.¹² Saroymulxonim sharofati bilan xazinadan ortiqcha mablag' ishlatilmagan holda, ko'zlangan maqsadga erishiladi.

Sohibqiron Amir Temur Saroymulxonimdan farzand ko'rmagan. Ammo sohibqiron o'z o'g'li Shohruh Mirzoni, suyuqli nabiralari Muhammad Sulton Mirzo, Xalil Sulton Mirzo, Ulug'bek Mirzo va boshqa mirzolarni bevosita zukko Saroymulxonim tarbiyasiga topshirgan edi. Bundan shuni anglash mumkinki, Amir Temur Saroymulxonimni juda hurmat qilgan va ardoqlagan.

Endi esa Xadichabegim to'g'risida.

Xadichabegim 1451-yilda Hirotda tug'ilib, 1457-yilda abu Sayyid Mirzoga hadya qilingan. 1469-yilda Abu Sayid Mirzo halokatga uchragach, Husayn Boyqaro Xadichabegimni ko'rib sevib qoladi va uni nikohiga oladi.

Xadichabegim makkorona hiylalarini ishlatib, haramda ulug' beka unvonini oladilar. Bu xonim doimo o'g'li Muzaffar mirzoni taxtga o'tqazish to'g'risida bosh qotiradi. Hamda buning uchun yo'ldagi deyarli barcha to'siqlarni olib tashlaydi. Juda ko'p insonlar bu yo'lda halok bo'ladi. Husayn Boyqaroni Xadichabegim Muzaffar Mirzodan boshqa o'g'illari bilan teskari qilib qo'yadi. Hatto ular o'z otalari bilan jang qilishgacha borishadi. Husayn Boyqaro saltanatining asosiy yemirilish sababi ham aynan shudir.

¹²Turg'un Fayziyev "Temuriy malikalar" 8-bet Toshkent-"O'zbekiston" - 2013

Ammo Alisher Navoiy Sab'ai Sayyorning X bobini Xadichabegimga bag'ishlagan. Navoiy Xadichabegimni Bilqisi soniy (Sulaymon payg'ambarning suyuqli xotinlarining nomi Bilqis bo'lgan), Sorai uzmo, Xadishai kubro deb atagan. Yana Xadichabegimning madhi ulyo (oliy yo'l boshchi), ismatut dunyo (dunyo pokizasi) kabi unvonlari bo'lgan¹³. Bundan tashqari Navoiy Xadichabegimga atab go'zal g'azal bitgan.¹⁴ Xurshid Davronning "Sirli olam" jurnalida e'lon qilgan "Navoiyning ichki armoni" nomli maqolasida "Navoiy Xadichabegimni sevgan, unga Husayn Boyqaro uylangach uylanmay o'tishga qaror qilgan" -degan fikrni aytadi. Ammo manbalarga ko'ra bu fikr to'g'ri emas. Chunki Xadichabegim go'zal bo'lsada, Navoiy sevadigan ayol bo'lmagan. Aksincha Xadichabegim boshqa saroy a'yonlari bilan birga Navoiy va Husayn Boyqaro o'rtasida ziddiyatlar keltirib chiqaradi.

"Boburnoma"da esa u haqida "O'zini oqila tutar, vale, beaql va purgo'y xotun erdi. Rofiziya (shialik mazhabi) ham ekandur", deb yoziladi.¹⁵

Demak, Xadichabegim Bobur nazarida ham o'ta hurmatli ayollar safida bo'lmagan.

"Yaxshidan bog' qolar, Yomondan dog'" deb bekorga aytilmagan albatta. Bu ikki xonim ham o'ta obro'li, hurmat- e'tiborga ega, go'zal ayollar bo'lishgan. Amir Temur va Husayn Boyqarodek buyuk insonlar ularni o'zlariga loyiq deb bilganlarmi demak, ular oddiy ayollardan farqlanib turishgan. Saroymulxonim har qanday vaziyatda o'zini boshqara oladigan ayol bo'lib, vaqti kelganda Amir Temurni ham boshqara olganlar. Ya'ni o'zgalar ongini o'zlariga qarata oladigan kuchga ega bo'lib, bu fan tilida *refleksiya* deyiladi.

Bibixonimning yana bir yutuqlari shundaki mol-dunyoga havasmand ayol bo'lmaganlar. Yoshliklaridan moddiy jihatdan to'laqonli hayot kechirganliklari tufayli, mol-dunyoga o'chlik hissi bo'lmagan.

Saroymulxonimning barcha go'zal fazilatlariga sabab *genetik* jihatdan xonlar avlodiga mansubliklaridir. Ma'lumki, saroy doimo ilm - ma'rifat o'chog'i sanalgan. Chunki xon va amirlar o'z atroflariga mamlakatning eng zakovatli insonlarini yig'ib, ba'zi qarorlar qabul qilish hamda yurtda islohotlar o'tkazish masalalarida ulardan maslahat so'rashgan. Buning yana bir sababi esa xonlar o'z farzandlarini ta'lim-tarbiyasini mana shunday buyuk aql-zakovat egalariga ishonib topshirganlaridir. Buning natijasida esa farzandlar ota-onalaridanda yuksakroq bilim tafakkurga ega bo'lgan bo'lsalar, keyinchalik bu qondan-qonga o'tib, nabiralarga, ham nasliy jihatdan ma'rifatlilik, ham saroydagi yuksak madaniy – ma'naviy muhit birgalikda o'z ta'sirni o'tkazib, komil insonni shakllantirgan. Saroymulxonim ham mana shunday muhitda tarbiya topganlar va saroy ayollariga xos barcha xususiyatlar xonimda mujassam bo'lgan.

Sangvinik temperamentga xos barcha xususiyatlar (bosiqlik, mulohazakorlik, sabrlilik va boshqalar) Bibixonimda mavjud bo'lganligi uchun

13 Navoiy "Asarlari" 15-jildligining 9-jildiga P.Shamsiyev tuzgan izohlardan

14 Navoiy mukammal asarlar to'plami 20 jildligi, 1-jild 59-bet 1987

15 Boburnoma 231-bet

ham u kishi har qanday vaziyatda o`zini Amir Temurga munosib ravishda tuta olganlar. Hech qachon o`z sha`niga gard yuqtirmaganlar.

Buning isbotini esa yuqorida keltirgan misollarimizda ko`rishingiz mumkin.

Xadichabegim esa xolerik (hukmronlikni yoqtiruvchi va shuhratparast, tanqidni qabul qila olmaydigan, jahldor...) temperament egasi bo`lgan. Insonlarni, go`zal xulq-odob muomala madaniyati bilan emas, aynan tashqi go`zallik bilan o`ziga rom eta olganlar. Hukmron bo`lish hissi boshqa har qanday mayldan ustunlik qilgan va shuning uchun ham Muzaffar Mirzoni taxtga o`tqazish yo`lidagi barcha to`siqlarni ustalik bilan olib tashlaganlar. Buning ortida esa o`z o`g`li nomidan mamlakatni boshqarish maqsadi yotgan albatta. Aynan Xadichabegimdagi *egoizm* Temuriylar saltanatining inqirozga yuz tutishida muhim omil bo`lib xizmat qilgan.

Yuqorida ikki go`zal Sharq ayollari to`g`risida so`z yuritdik. Biri Temuriylar saltanatining nozik ustunlaridan biri bo`lgan bo`lsa, ikkinchisi ushbu saltanat ildizlariga bolta urgan. Ularning saroydagi mavqei teng bo`lsada, ikkisi shu mavqedan turli yo`llarda foydalanganliklarini guvohi bo`lamiz.

Ayol nozik xilqat. Uning ummondek mehri yuksak tog`larni eritgudek qudratga ega bo`lsa, uning qahri dunyoni o`zgartirib yuborishga qodir!

Umuman har qanday ayol ichki dunyosida sirli bir kuch yashiringan bo`ladi. Biroq shu kuchni mustahkam iroda va sabr bilan to`g`ri yo`lga yo`naltirilgan insonlargina buyuklik martabasiga erisha oladilar.

Xadichabegimdagi ichki kuch ham to`g`ri yo`naltirilganda, balkim, mamlakatimiz tarixida Saroymulxonim kabi yorqin iz qoldirilgan bo`lar edi.

Dunyo yaralgandan buyon ezulik va yovuzlik kurashi davom etmoqda. Eng muhimi biz yoshlar, buyuklar o`tmishini o`rganish barobarida, ularning yutuq va kamchiliklaridan xulosa chiqargan holda, qalbimizda ezgulik saltanatini bunyod etishdek vazifani bajarishga kuch topa olaylik.

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Bolbekova U.J.
teacher
Department "Teaching languages"
Samarkand Institute Economics and Service

SHADOWING EDUCATIONAL TECHNOLOGY IN TEACHING ENGLISH

Abstract. This article provides information on the importance of shadowing educational technology in language teaching, as well as the opinions of scholars on English language teaching methods and educational technologies. The stages of Shadowing educational technology are explained.

Key words: teaching, foreign languages, English, educational technologies, shadowing, motivation, listening, speaking, learning activities.

President Of The Republic Of Uzbekistan Sh. M. Mirziyoyev said that it is necessary to popularize the study of foreign languages among the population and create the necessary conditions for their perfect assimilation, coordinate the introduction of internationally recognized programs and textbooks of teaching foreign languages at all stages of education, and develop modern teaching skills in teachers.

As N. N. Normatova states, "The process of developing the oral speech skills of foreign language for linguistic departments of Higher Education is different from the process of developing it for non-philological departments. The process has its own peculiarities. The quality of education, which is a bilateral process between the teacher and student, depends on the didactic perfection of teacher`s mastery, and on the other hand, the on the student's motivational activity".

Whether we are going to use the traditional or innovative methods we have to make sure that teaching goals should be established according to the needs, lacks, and necessities of the targeted student population and educational environment to strengthen motivations and ensure interactive participation in the learning process. [Nurutdinova et al., 2016]

Nowadays there are a lot of techniques and methods for teaching English.

People can frequently distinguish the finest language educators by their dedication to inventive and novel classroom teaching techniques. These language instructors know they can employ no quick fix to allow pupils to rapidly acquire fluency in their target language. However, things have changed over the years, and though it was one of the most effective methods of teaching English to young students, it no longer considered the same now. This is due to various reasons, maybe because: the present generation gets exposure to the world through social media their knowledge base is augmenting by the information available on the

internetthe students nowadays are more impatient and to grab their attention, teaching methods need to cater to their dynamic thinking process.

Shadowing educational technology is one of the useful educational technologies in the development of teaching English.

Shadowing helps you develop two skills at the same time: listening and speaking. Listening to a native speaker, you will learn to distinguish between individual sounds and the features of pronouncing whole phrases. Then you repeat behind it by copying the correct accent.

The Shadowing technique is suitable for students. In order to repeat correctly after the carrier, you need to know the rules of pronunciation. Only a few can learn the language by ear from scratch. Perhaps, without prior preparation, you will not hear the difference in pronunciation.

There are four main parts of classroom action research in the shadowing technology. They are; planning, action, observation, and reflection.

Part one is planning. At this stage, everything needed in the teaching and learning process that will be carried out includes what, who, where, and how. The planning stage can be described as follows; Determine the research schedule, design learning activities (lesson plan), prepare teaching materials and prepare observation sheets and student worksheets (tests).

Part two is action. The researcher, as well as the lecturer, will take the following steps; Students are given a clue about the material to be delivered, students are divided into small groups and given the task to predict the contents of the lecture to be listened to (pre-listening study), students are allowed to listen to listening material through audiovisual, and each student is given a worksheet about the material they will hear (While-listening task), the students are divided into small groups to brainstorm on perceptions and interpretations of what they have listened to through the audiovisual media (Post listening task), in the final stages of students individually instructed to make a summary based on the results of interpretation and brainstorming in small groups.

Part three is observation. At this stage, the researcher observes students' activeness in group discussions and the concentration and focus of students during listening activities with audiovisual media applied.

Part four is reflection. In the final stage of this cycle, the researcher collects student work in worksheets and summaries. Then analyze the observation checklist and video recorder data to conclude the activities that occur in cycle

The technique of data collection that are applied in this research are 1) Observation. The researcher had used an observation checklist and field notes. The purpose of the observation was to know the activities during the teaching and learning process, such as how the lecturer explained the materials, what the students would respond to, and how the students have been worked in doing the test. 2) Test. The researcher also used tests to know the students' improvement in listening by using the shadowing technique. The researcher analyzed data using a checklist/observation sheet and field notes to describe the process of teaching and

learning. Besides that, the researcher calculated the data of students' score listening skills by using a formula.

Conclusion. Today, the teaching and learning of foreign languages is becoming very popular. Various methods and educational technologies have been developed in teaching English. Shadowing educational technology is important in teaching English.

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*Boliev A.M.
yordamchi
Jizzax politexnika instituti
Tulakov J.T.
yordamchi
Jizzax politexnika instituti
Otamurodov S.B.
talaba
Jizzax politexnika instituti*

MIKRO GES SUV ENERGIYASI PARAMETRLARINI TAHLIL QILISH

Annotatsiya. Ushbu maqolada Mikro geslarni quvvatlari bo'yicha tanlangan qurilmalarini ishlab chiqish va tadqiq qilish tavsiyalari keltirib o'tilgan.

Kalit so'zlar. Mikro ges, quvvat, suv oqimi, energiya parametrlari, nominal quvvat, samaradorlik, energiya iste'moli.

*Boliev A.M.
assistant
Jizzakh Polytechnic Institute
Tulakov J.T.
assistant
Jizzakh Polytechnic Institute
Otamurodov S.B.
student
Jizzakh Polytechnic Institute*

ANALYSIS OF PARAMETERS OF MICRO-HEDP HYDROPOWER

Abstract. In this article, recommendations for the development and research of devices selected for the power of microwaves are given.

Keywords. Micro hydro, power, water flow, energy parameters, nominal power, efficiency, energy consumption.

Zamonaviy sharoitda birinchi navbatdagi vazifalardan biri RES (qayta tiklanadigan energiya manbalari) negizida elektr stansiyalarining raqobatbardoshligini umuman oshirishga qaratilgan chora-tadbirlar majmuasini amalga oshirish, shuningdek, MikroGES va ularning kombinatsiyalaridan foydalanishning ilg'or texnologiyalarini aniqlashdan iborat. ulardan muayyan hududda foydalanish iqtisodiy, texnik va ijtimoiy jihatdan asoslanadi.

Shu bilan birga, qayta tiklanadigan energiya manbalaridan foydalanish hududning muhandislik infratuzilmasini rivojlantirish yo'nalishlarini belgilab

beruvchi va belgilangan vazifalarni hal etish yo'llarini ko'rsatuvchi hududni barqaror rivojlantirish dasturining organik va zarur elementi sifatida qaraladi. muammolar.

Shunday qilib, energetika muammosi va uni hal etish uchun muqobil energiya manbalarini jalb etish zarurligi O'zbekiston Respublikasi Prezidentining "Muqobil energiya manbalarini yanada rivojlantirish chora-tadbirlari to'g'risida"gi qarorida qayd etilgan. Olingan ifoda har qanday shakldagi energiya ekstensivlik va intensivlik omillari mahsulotiga mutanosib bo'lgan ma'lum fizik tamoyillarga mos keladi. Bunda H bosimi suyuqlikning intensivlik koeffitsienti yoki energiya intensivligining ko'rsatkichi, suv hajmi W kenglik omili yoki energiya iste'molining miqdoriy ko'rsatkichidir.

Suv oqimining energiya quvvati zichligi E_w

$$E_w = \rho_w * Q_w * V_w^2 / (2 * S) = \rho_w * V_w^3 / 2, \text{ kW/m}^2$$

ρ_w – suvning zichligi;

Q_w – suv iste'moli ($Q_w = S * V_w$);

V_w – suv tezligi;

S – suv oqimining ko'ndalang kesimi maydoni.

Suv energiya oqimining kuchi N_w ga teng

$$N_w = E_w * S = S * \rho_w * V_w^3 / 2 \quad (2.59)$$

GESlarning energiya parametrlari

Mikro GESning chiqish quvvati (iste'molchiga o'tkaziladigan quvvat) teng

$$N_{\text{МГЭС}} = N_T * \eta_{\text{П}} = N_w * \eta_T * \eta_{\text{П}} \quad (2.60)$$

bu erda N_T - turbina quvvati;

$\eta_{\text{П}}$ - samaradorlik energiyani turbinadan iste'molchiga o'tkazish (generatoridagi mexanik yo'qotishlar va yo'qotishlar hisobga olinadi)



Biroq, agar qayta tiklanadigan energiya manbalarini etkazib berish rejimlari va yuklanish jadvallari sezilarli darajada mos kelmasa, o'rta quvvatli Hidroelektrostansiyasi talab qilinishi mumkin va shunga mos ravishda ushbu qayta tiklanadigan energiyaga asoslangan elektr stantsiyasining nominal quvvati uchun katta zaxira bo'lishi kerak. energiya manbai. Shu munosabat bilan, qayta

tiklanadigan energiya manbalarining har bir turi uchun alohida elektr stansiyalaridan tashkil topgan bir nechta qayta tiklanadigan energiya manbalariga asoslangan MikroGES qurilmalar taklif etiladi. Ma'lumki, elektr stantsiyalarining parametrlarini tanlashning asosiy mezonlari energiya va ishlab chiqarilgan energiyaning narxidir. Xuddi shu mezonlar, pirovardida, belgilangan yuk sharoitlari ta'minlangan holda, MikroGES elektr stantsiyalari, shu jumladan kombinatsiyalanganlar uchun asosiy hisoblanadi

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Boykobilova I.
assistant
Department of Accounting and Audit in Other Industries
Samarkand Institute of Economics and Service
Abdurakhmanov D.
student
Samarkand Institute of Economics and Service

EFFECTIVE AUDIT STRATEGIES IN A CHANGING BUSINESS ENVIRONMENT

Abstract. This article examines the importance of effective audit strategies in a changing business environment. Particular attention is paid to the role of auditors in identifying and managing risks, as well as collecting information to optimize audit processes.

Key words: trends, economic environment, technological innovation, role of auditors, risk identification, analysis, audit optimization, overcoming obstacles, effective, strategies.

Introduction: The modern business environment is constantly changing under the influence of economic, technological and regulatory factors. An important tool in this process is audit – a process that helps assess the effectiveness of business processes, identify risks and ensure financial transparency.

The purpose of this article is to review the current challenges faced by companies in a rapidly changing business environment and propose effective audit strategies to successfully overcome these challenges. The article examines the role of audit in adapting to change and provides specific methods and approaches that audit firms and businesses can use to improve their performance and manage risk. Analysis and recommendations for businesses and audit firms are the main aspects discussed in the article. article.

Main part: An audit allows you to identify the strengths and weaknesses of an organization and create a basis for studying the financial position of an enterprise in order to solve problems of preventing administrative liability. A mature manager fully understands the need for reviews and usually insists on them being carried out without delay. The results of the inspection and the future activities of the company directly depend on the level of knowledge, professional skills and qualifications of the inspecting employees. This is because auditing standards give them wide discretion. Globalization and international competition: The expansion of international markets and the development of communication technologies are increasingly globalizing the business environment. Companies face increasing competitive pressure at global and regional levels. Financial risks and market volatility, economic crises, financial instability and political

instability create additional challenges for companies in managing financial risks and ensuring stability.

Auditors must be especially alert to these changes to adapt their audit strategies and techniques to the new challenges facing their clients in today's economic environment while assessing the overall monetary objectives necessary for the existence and successful development of the enterprise.

The role of auditors in identifying and managing risks:

➤ Auditors play an important role in identifying and managing risks for companies. Below are the main aspects of their work:

➤ Assessing internal control systems: Auditors evaluate companies' internal control systems to identify weaknesses and vulnerabilities that could lead to risk.

➤ Financial statement analysis: Auditors analyze companies' financial statements in detail to identify possible errors, fraud, or non-compliance with regulatory requirements.

➤ Developing a risk management strategy: Based on audit results, auditors help companies develop effective risk management strategies, including recommendations for improving internal control systems and procedures.

Currently, most financial scientists believe that the main monetary goal of an enterprise as an economic entity is to increase the value of capital or, in extreme cases, to maximize net profit, which is an integral part of the system that ensures reliability. financial reporting and helps them effectively manage their activities in a volatile business environment. Modern technology allows audit firms and companies to use data and analysis to perform audit procedures more efficiently and accurately.

A comparative analysis of the concepts and performance of accounting systems in different countries is presented by Harald Hungenberg, Ph.D., Head of the Institute of Enterprise Planning, Professor of Business Economics at the Justus Liebig University in Giessen and the Technical University of Berlin, and Harald Hungenberg, Professor of Business Economics at the Friedrich Alexander University of Erlangen -Nuremberg, made it possible to develop the concepts of modified cost-based planning, suitable for enterprises operating only in the domestic market or in international markets, and move to international accounting standards. newbies.

“Strategy” is given in the works of R. A. Fatkhutdinov, according to which “strategy is a program, plan, general course of a management entity to achieve strategic goals in any field of activity.”

The audit strategy is critical to the success of the audit engagement. According to ISA 300, a good audit strategy should have the following important values:

How to determine an audit strategy? In the audit strategy, the auditor must define the characteristics of the engagement and determine the scope of the audit. This is a very important point before starting the next job. For example, auditing

client financial statements based on international auditing standards and client financial statements prepared on a US GAAP basis. The auditor should also determine the reporting objectives of the audit engagement to determine the timing of the audit and the nature of the information required. For example, the audit report is required by the parent company and is not published online. Part of the audit strategy is for auditors to identify or define the key factors or key areas of the audit engagement.

Thus, the concept of strategy is multifaceted and includes the target component of the long-term development of the organization, a program and comprehensive plan, resource provision, sufficient structure, a system of relations within the organization and interaction with the external environment.

Use of analytical tools: Auditors can use analytical tools to further analyze companies' financial information and identify potential risks. **Using big data:** Collecting and analyzing large amounts of data allows auditors to gain a more complete picture of companies and their environment, which helps identify hidden risks and trends. Overall use of data and analysis allows auditors to analyze companies' financial information more deeply and accurately, identify risks in advance and develop effective strategies for managing them, which helps improve the quality of the audit and improve risk management in the organization.

Summary: In today's dynamic business environment, effective auditing plays a critical role in ensuring sustainable development of companies and minimizing risks. This article explores the key aspects of using data and analytics to overcome barriers to audit optimization and implementing effective strategies.

In conclusion, successful implementation of effective audit strategies requires not only the use of modern technology and analytical tools, but also active management support, flexibility in approaches to changing company processes and culture, and continuous training and development of employees.

An important aspect of justifying the development strategy of a commercial organization for its implementation is the forecast of business prospects and an adequate assessment of the reality of the chosen development strategy. Despite the large amount of scientific and educational literature in the field of strategic development, management (management), strategic planning and even strategic accounting, strategic control and issues of organizing strategic audit remain poorly developed. The research conducted as part of this work allows us to draw the following main conclusions, which, in turn, may be important for the further development of the methodology for strategic control and audit of commercial organizations.

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Bozorov H.X., PhD
Termiz davlat universiteti o'qituvchisi,
filologiya fanlari bo'yicha falsafa doktori

ERTAK JANRI VA UNDAGI TIL IMKONIYATLARI

Annotatsiya. Bugungi kunda tilshunoslik tarmoqlarining oldida turgan muhim vazifalardan biri til va madaniyatning kesishidan hosil bo'lgan lingvomadaniyatshunoslikning o'ziga xos jihatlarini tadqiq qilishdan, ilmiy xulosalar chiqarishdan iborat. Mana shunday tadqiqot ishlarini amalga oshirishda xalq og'zaki ijodiga murojaat qilish katta samara beradi. Ushbu maqolada ham xalq og'zaki ijodining ommabop janrlaridan biri ertaklarning til imkoniyatlari, lingvomadaniy jihatlarni ochib berishdagi o'rni haqida fikr yuritilgan.

Kalit so'zlar: folklor, ertak, ertak janri, dealektizm, tarixiy leksika, realiya, ekzotizm, stereotipik matn.

Bozorov H.K., doctor of philosophy in philology
teacher
Termiz State University

THE GENRE OF FAIRY TALES AND LANGUAGE POSSIBILITIES IN IT

Abstract. Today, one of the important tasks facing the branches of linguistics is to research the specific aspects of linguistics and culture, which are formed by the intersection of language and culture, and to draw scientific conclusions. In the implementation of such research works, it is very effective to turn to folklore. In this article, one of the popular genres of folklore, fairy tales, is discussed about the language possibilities, the role of revealing linguistic and cultural aspects.

Key words: folklore, fairy tale, fairy tale genre, dealectism, historical lexicon, reality, exoticism, stereotypical text.

Kirish. Har bir xalqning o'y-xayoli, yashash tarzi, o'ziga xos milli madaniyati, mentaliteti, urf-odat va an'alarini tarixiy ildizlarini ifodalay olish imkoniga ega folklor janrlariga murojaat qilishga undamoqda. O'tgan asrda G'arb tilshunoslarining e'tiborini tortgan lingvofolkloristika XXI asrning ilk yillaridanoq o'zbek tilshunoslarining ham diqqatini tortib kelmoqda. Folklor janrlari ichida ertak janri til imkoniyatlariga boyligi, lingvomadaniy jihatlarni o'ziga jamlaganligi bilan alohida ahamiyatga ega. Shu o'rinda o'zbek ertakchiligi tarixi haqida to'xtalib o'tsak, maqsadli bo'ladi. O'zbek ertakchiligi ham uzoq tarixga ega. "Dede qo'rqut" kitobidan buyon to XX asrning boshigacha vujudga kelgan

barcha adabiy va badiiy obidalarida, turli ko‘rinishda o‘zbek xalqining qadimiy ertakchiligi, dostonchiligi, qissalari, afsonalari o‘z izlarini qoldirgan. *Janriy xususiyatiga ko‘ra ertaklar adabiyotlarda quyidagicha bayon etiladi: “Ertak epik turga mansub qadimiy janrlardan biri bo‘lib, xalq orasida g‘oyat keng tarqalganligi, asrlar davomida shakllangan milliy-madaniy qadriyatlar, xalqning turmush-tarzi, an‘analari va urf-odatlarini o‘ziga xos tarzda epik talqin qiladigan, asosan, professional ijrochilar – ertakchilar tomonidan nasriy usulda, og‘zaki tarzda hikoya etish orqali ommalashishi, yaxlit poetik tizim sifatida shakllanganligi, o‘ziga xos badiiy struktura va motivlar tarkibiga egaligi, hayotiy voqelikni xayoliy uydirma, fantastik talqin orqali ifoda etishi bilan xarakterlanadi”*¹⁶.

Tadqiqot metodologiyasi. Turkiy xalqlar folklorida ertak dastlabki adabiy janrlaridan biri ekanligi ma‘lum. Ertak atamasiga O‘TILda quyidagicha izoh beriladi: “Ertak – xalq og‘zaki poetik ijodining asosiy janrlaridan biri; to‘qima va uydirmaga asoslangan, sehrli-sarguzasht va maishiy mazmundagi epik badiiy asardir” [O‘TIL.V.52].

“Ertak atamasi qadimgi turkiylar lahjasida **“hazillashmoq”, “so‘zlamog‘”, “hikoya qilmoq”, “kuylamoq”** ma‘nolarida qo‘llanilgan va muayyan darajada omonimik mohiyat kasb etgan **“ar//yer//ir//or”** arxaik o‘zak-leksemasiga «-ta» yasovchi qo‘shimchasini qo‘shish orqali fe‘lning buyruq maylidagi shakli – **“biror narsani hikoya qil”, “muayyan voqeani so‘zlab ber”** ma‘nosidagi **“arta//yerta//irta”** fe‘li hosil qilingan. Ana shu leksemaga proturkiylar tilidagi harakat nomi yasovchi **“-q // -k”** affiksini qo‘shish natijasida xayoliy uydirma va fantastik tasvir asosiga qurilgan folklor janri nomini bildiruvchi **“ertak”** atamasi yuzaga kelgan¹⁷. O‘zbek tilining etimologik lug‘atida qadimgi turkiy tildagi **“o‘t-“, “kech-”** ma‘nosini anglatgan ert- fe‘lidan – (ä)k qo‘shimchasi bilan (ert+äk= ertäk) yasalganligi hamda **“o‘tmish”, “kechmish”**¹⁸ ma‘nosini anglatganligi qayd etiladi.

M.Koshg‘ariyning **“Devonu lug‘otit-turk”** asarida bu atama **“etuk”** tarzida qayd etilgan: **“Этүк – hikoya, ertak; biror maqsadni shohga bildirish, hikoya qilish uchun ham bu so‘z qo‘llanadi. Asli bir narsani hikoya qilishdan olingan”**¹⁹. Bu atama **“ertak”, “ertaki”, “irtaki”** shaklida turkiy xalqlarda faol qo‘llaniladi. Jumladan, o‘zbeklar istiqomat qiladigan barcha hududlarda keng tarqalgan bu atama xalq og‘zaki badiiy ijodining to‘qima va xayoliy uydirmaga asoslangan, sehrli sarguzasht, fantastik talqin va maishiy mazmundagi epik turga mansub asar ma‘nosida qo‘llaniladi.

O‘zbekiston hududida ertak janrining syujet birligini saqlagan holda aynan shu ma‘no (ertak ma‘nosi)ni ifodalovchi bir qancha terminlar ham mavjud. Toshkent va uning atrofidagi hududlarda ertak so‘zi o‘rnida **“cho‘pchak”** so‘zi

16 Mirzayev T. va boshqalar. O‘zbek folklori. Darslik. – Toshkent: 2020. – B. 141.

17 Mirzayev T. va boshqalar. O‘zbek folklori. Darslik. – Toshkent: 2020. – B. 141.

18 Раҳматуллаев Ш. Ўзбек тилининг этимологик луғати. I жилд. – Тошкент: Университет, 2000. – Б. 469.

19 Махмуд Кошғарий. Девону луғотит-турк. I-том. – Тошкент: Фан, 1960. – Б. 98.

qo‘llanib kelingan. “Cho‘pchak” atamasi fonetik o‘zgarishlarga uchragan holda boshqa turkiy xalqlar tilida ham ishlatiladi. Masalan, oltoy tilida ertak ma’nosini anglatuvchi bu atama, asosan, “chörchök” (ya’ni “cho‘rchäk”) so‘zi “afsona”, “ertak”, “masal” kabi ma’nolarini ifodalasa, “*chörchöktö*” fe’li “ertak aytmok” ma’nosini bildiradi²⁰. Samarqand va Farg‘ona vodiysining ayrim joylarida, Surxondaryo va Qashqadaryo viloyatlarida “matal”, Buxoro va Navoiy viloyatlari va shu kabi ayrim “ikki tilli (o‘zbek va tojik tillarida) so‘zlashuvchi aholi o‘rtasida “shuk” yoki “ushuk”²¹, Xorazm viloyati aholisi shevasida “vorsoqi” so‘zi “ertak” ma’nosida ishlatiladi²². Ertak terminining yuqorida ta’kidlangan: matal, cho‘pchak, vorsoqi, ushuk ko‘rinishlaridan tashqari xalqimiz orasida *o‘tirik, tatal* kabi terminlar ham uchraydi.

Alisher Navoiy asarlarida bu so‘z “cho‘rchak” shaklida “afsona, ertak” ma’nolarda qo‘llanilgan. Buni folklorshunos olim O.Madayev shunday izohlaydi:

Habibim husni vasfin uyla muhlik anglakim bo‘lg‘ay,

Qoshinda qissai Yusuf bir uyqu kelturur cho‘pchak.

(Baytdagi “cho‘pchak” “Navodir ush-shabob”ning 1959-yilgi nashrida “cho‘rchak” shaklida yozilgan). Baytdagi “uyqu” so‘ziga e’tibor berib. Ma’lum bo‘ladiki, oqshom payti bolalarni uxlatishda ertakning sehrlil ta’sir kuchidan bugungi kunda foydalanar ekanmiz, bu an’ana ham bejiz paydo bo‘lmaganini qayd etamiz²³.

Folklorshunos olim, prof. D.O‘rayeva ertak terminining genezisi haqida fikr bildirar ekan, ushbu terminning davrlar o‘tishi bilan tilda bo‘ladigan o‘zgarishlarni inobatga olib, “ertak” atamasini yasama so‘z sifatida baholaydi. Olima fikrini quyidagicha izohlaydi: ertak so‘zi “er” aniqrog‘i, qadimgi turkcha “qo‘shiq” ma’nosini ifodalovchi “ir” (“yir”, “jir”) so‘ziga “-tak” yoki “-tek” qo‘shimchasini qo‘shilishidan hosil bo‘lgan”. Bunda olim ertaklarning qo‘shiqqa o‘xshash bir necha xususiyatlarini keltirib o‘tadi: ertaklar qo‘shiq kabi sajli boshlanmalarga ega hisoblanadi; ayrim ertaklar syujetini qo‘shiqlarsiz tasavvur etib bo‘lmaydi (masalan, “Yoriltosh”, “Musicha”); ertakda voqealar o‘zaro bog‘lanishga xizmat qiladigan “*shohning qahri keldi, ilonday zahri keldi*”, “*oy desa – og‘zi bor, kun desa – ko‘zi bor, shirindan shirin so‘zi bor*”, “*yo‘l yuribdi, yo‘l yursa ham mo‘l yuribdi...*” kabi qoliplashgan”²⁴ birliklar mavjudligi bilan fikrlarini dalillaydi.

S.Ro‘zimboyev va H.Ro‘zmetovlar “Folklor atamaları qisqacha izohli lug‘ati”da: “Ertak terminining ma’nosiga qaraydigan bo‘lsak, u “erta” so‘zi bilan

20 Mirzayev T. va boshqalar. Ko‘rsatilgan manba:– B. 141

21 Абдурахимова Д.А. Мактабгача тарбия ёшидаги болаларни ахлоқий руҳда тарбиялашда халқ эртақларидан фойдаланиш. Пед.фан.номз...дисс. – Тошкент, 1998. – Б. 11.

22 Mirzayev T. va boshqalar. Ko‘rsatilgan manba: – B. 141.

23 Мадаев О. Ўзбек халқ оғзаки ижоди. Ўқув қўлланма. – Тошкент: Mumtoz so‘z, 2013. – Б. 108.

24 Navola quyidagi manbadan olindi: Исраилова С. Замонавий тилшуносликда халқ эртақларини ўрганишнинг лингвокультурологик хусусиятлари. // Сўз санъати. – Тошкент, 2020. № 5. – Б. 232.

aloqador bo‘lib, ertagi, ilgarigi bo‘lib o‘tgan voqealar ma’nosini beradi”, deb ko‘rsatadi²⁵.

Tahlil va natijalar. Ertak terminining izohi yuqorida turlicha talqin qilinganligi ko‘zga tashlanadi. Shuni unutmazlik kerakki, ushbu fikrlarni bog‘lab turuvchi *“bayon qilmoq”, “hikoya qilmoq”* birikmalari ertak terminini yuzaga kelishida muhim vosita hisoblanadi.

Xalq ertaklari tiliga e’tibor berar ekanmiz, unda o‘zbek tilining imkoniyati keng ekanligi ko‘zga tashlanadi. Ertaklarning lingvistik tadqiqi ertak tilida mavjud urf-odat, xalqimizga xos mentalitetni ifodalovchi unsurlarning ko‘pligi bilan ahamiyatlidir. Jumladan, o‘zbek xalq ertaklari tilida qo‘llangan gaplarning strukturasi e’tibor qaratilar ekan, unda aytuvchi (ertakchi)ning ham mahorati, nutqi, xalqning milliy-madaniyatidan xabardorligi talab etiladi. Xalq ertaklarimizning gap qurilishiga e’tibor qaratisa, hayotiy-maishiy ertaklarda aksariyat hollarda qo‘shma gaplardan, aralash murakkab qo‘shma gaplardan ko‘proq foydalanish holatlari kuzatiladi. Hayvonlar haqidagi ertaklarda esa *sodda* va *uyushiq bo‘lakli gaplar* yetakchilik qiladi.

Ertak – xalq milliy-madaniyatini aks ettiruvchi o‘ziga xos folklor janri hisoblanib, lingvistik nuqtayi nazardan an’anaviy formulalarning ko‘pligi bilan ajralib turadi. Ertak janri asrlar davomida og‘izdan og‘izga o‘tish natijasida o‘zgaruvchanlik xususiyatlariga ham ega bo‘ladi. Ushbu janr asrlar davomida o‘zgarish xususiyatiga ega bo‘lsa-da, unda xalq mentaliteti bilan bog‘liq bo‘lgan qarashlarni epitetlar, metaforalar, giperbola, o‘xshatish va qiyoslar, takrorlar orqali ko‘rsatib beriladi. Xususan, ertaklar tilida mavjud *“oltindek o‘g‘il”, “boldek erimoq”, “toshday zirillamoq”, “uchar qushday pirillamoq”, “muzday qotmoq”, “shamday qotmoq”, “na’ra kabi o‘tinchlar”, “g‘ordek og‘iz”, “naqsh olmaday yuz”, “kalladay qulf”, “mumdek erimoq”, “ozod, hur, go‘zal hayot”, “qo‘lidagi hassasidan burni uzun”, “qorong‘i zulmat”, “yorug‘ nur”, “g‘am loyi”, “shodlik to‘yi”, “qora zulmat”, “umidsiz dovdirash”* kabi o‘ziga xos birliklar ertak janrining til imkoniyatlari kengligini ko‘rsatadi.

O‘zbek xalq ertaklarida badiiy uslubga xos xususiyatlar, shuningdek, ushbu janrning ko‘proq bolalar uchun xoslanganligi uchun so‘zlashuv uslubiga xos unsurlar yaqqol ko‘zga tashlanadi. Xususan, *hezlamov, shoti, ena, govgum (govgun), sho‘x-sho‘tanoq, badar, kadi, bikach, keli, kelisop, qoqshov, bachcha* kabi dialektlar, *kosagul, chora* (yog‘och tovoq), *botmon* (ertak tilida sath o‘lchovi), *kamand* kabi ko‘plab tarixiy leksemalardan keng foydalanilgan. Bu esa ma’lum bir hududning koloritini ta’minlaydi. Bundan tashqari xalq ertaklarimizda o‘zbek xalqi milliy-madaniyatini namoyon qiluvchi *dasturxon, atlas, paranji, supa, xurjun, oftoba* kabi realiyalar, *yasovul, polov, atala, chopon, do‘ppi, navro‘z* kabi ekzotizmlar ko‘plab qo‘llanilgan²⁶. Bu esa yosh avlodni xalqimizga xos milliy-mental xususiyatlari bilan tanishtirish, o‘zbek xalqiga xos etnomadaniy

25 Рўзимбоев С., Рўзиметов Х. Фольклор атамалари қисқача луғати. – Урганч, 2007. – Б. 52.

26 Bozorov H. O‘zbek xalq ertaklarining lingvomadaniy tadqiqi. Filol.fan.b.fals.dok. ...diss. – Termiz, 2023. – B. 43.

stereotiplarni singdirishda ertaklar asosiy manbalardan biri bo‘lib xizmat qiladi. Ertak boshlanmasidagi “*Bir bor ekan, bir yo‘q ekan*”, tugallanmasidagi “*murod maqsadiga yetibdi*” yoki “*oy desa og‘zi bor, kun desa ko‘zi bor*” kabi stereotipik matnlar asrlar osha xalqimiz lisoniy olamida yashab kelmoqda. Bundan tashqari, ertaklar tilida “o‘zbek xalqining milliy madaniyatini, ma’naviy qiyofasini, o‘ziga xos mentalitetini aks ettiruvchi leksik birliklar qo‘llanadi. Bunday birliklarda ifodalangan lug‘aviy ma’nodan tashqari faqat o‘zbek xalqiga tegishli bo‘lgan urf-odat, marosim, an’ana va qadriyatlar ham ifodalovchi so‘zlar”²⁷ – etnografizmlar ham talaygina. Etnogarfik xarakterga ega birliklarni tahlil qilish ham muhim ahamiyatga ega.

Xulosa va tavsiyalar. Xulosa o‘rnida shuni aytishimiz mumkinki, xalq hayoti haqida xabar beruvchi, milliy-madaniy xususiyatlarni o‘zida namoyon qilgan xalq ertaklarini tilshunoslik nuqtayi nazardan tadqiq qilish muhim. Chunki ertak janrida xalq hayotini hikoya qiluvchi lingvomadaniy unsurlar talaygina. Bu esa ertak matni tahlili asosida har bir xalqqa xos milliy-madaniy xususiyatlarning tarixini bilish imkonini beradi.

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*Butayarov Sh.
Qarshi davlat universiteti talabasi*

O‘ZBEKISTONDA NEFT-GAZ SANOATI RIVOJLANISHINING IMKONIYATLARI VA MUAMMOLARI

Annotatsiya. Ushbu maqolada O‘zbekistonda neft-gaz sanoati rivojlanishining imkoniyatlari hamda muammolari o‘rganilgan va tahlil qilingan. Bu sohani rivojlantirish bo‘yicha taklif va tavsiyalar ishlab chiqilgan.

Kalit so‘zlar: Neft- gaz, texnologiya, sanoat, energetika, korxonalar, eksport.

*Butayarov Sh.
student
Karshi State University*

OPPORTUNITIES AND PROBLEMS OF OIL AND GAS INDUSTRY DEVELOPMENT IN UZBEKISTAN

Abstract. In this article, opportunities and problems of oil and gas industry development in Uzbekistan are studied and analyzed. Proposals and recommendations for the development of this area have been developed.

Key words: Oil and gas, technology, industry, energy, enterprise, export.

Iqtisodiyotni modernizatsiyalash sharoitida milliy iqtisodiyotda tarkibiy o‘zgarishlarni amalga oshirish, xususan, sanoat tarmoqlarini barqaror rivojlantirish, ishlab chiqarishni modernizatsiyalash, texnik-texnologik jihatdan yangilash va diversifikatsiya qilish, innovatsion texnologiyalarni keng ko‘lamda joriy etishga katta e‘tibor qaratilmoqda. Darhaqiqat, mamlakatning iqtisodiy taraqqiyoti va o‘sinh sur‘ati real sektor korxonalarini barqarorligiga, ularning rivojlanish darajasiga bevosita bog‘liq. Shu nuqtai-nazardan, har qanday davlat sanoat korxonalarini rivojlantirish va ularning barqarorligini ta‘minlashga asosiy e‘tiborni qaratadi.

Ma‘lumki, O‘zbekiston neft-gaz sanoati mamlakat energetika xavfsizligini ta‘minlash nuqtai-nazaridan iqtisodiyotning strategik sohalaridan biri hisoblanadi. O‘zbekistonda neft va gaz zaxiralari, ularni qidirish va o‘zlashtirish mamlakatning energetika xavfsizligini ta‘minlash imkonini berdi. Tabiiy gaz mamlakatning asosiy eksport resurslaridan hisoblansa, qazib olinayotgan neft ichki talabni to‘liq qondirmoqda.

1997 yilda Buxoro neftni qayta ishlash zavodi ishga tushirilgan bo‘lib, uning yillik qayta ishlash quvvati 2,5 million tonna uglevodorod xomashyosini tashkil qiladi. Ushbu korxonaning texnologik jarayoni to‘liq zamonaviy texnologiyalarga asoslanadi va u quyidagi mahsulotlarni ishlab chiqaradi: suyultirilgan neft gazi, yengil nafta, rivormat, reaktiv yoqilg‘i, dizel yoqilg‘i va

mazut.

Mamlakatimizda Yalpi ichki mahsulot uzoq davr mobaynida har yili kamida 8 foizga o'sishi sur'atlarini ta'minlash bo'yicha o'ta muhim vazifalar turgan pallada O'zbekiston neft-gaz tarmog'ining barqaror rivojlanishi ulkan ahamiyatga ega bo'lmoqda. Biz korxonalar faoliyati yo'nalishini shunday qayta tashkil qilishga urinyapmizki, eng asosiy e'tibor tabiiy gaz kabi strategik xom ashyo eksportini oshirishga emas, uni qayta ishlash va yuqori qo'shimcha qiymatga ega bo'lgan, sifati va ekologiya talablari bo'yicha jahon standartlariga javob beradigan, yuqori likvidli neft-gaz va kimyo mahsulotlarini ishlab chiqarish bo'yicha o'z quvvatlarimizni rivojlantirishga qaratilishi lozim.

O'zbekiston neft-gaz tarmog'ini rivojlantirishning har bir ustuvor yo'nalishini ko'rib chiqamiz. Uglevodorodlar zaxiralarini oshirish yo'li bilan resurslar bazasini yanada kengaytirish neft-gaz tarmog'i samarali faoliyatining asosini tashkil qiladi. Asosiy negizi neft va gazdan iborat bo'lgan bu zaxiralar mamlakat iqtisodiyotining yonilg'i-energetika resurslariga tobora oshib borayotgan ehtiyojini ta'minlaydi. Bunday sharoitlarda, neft va gaz konlarini izlash va respublikaning uglevodorod resurslarini yanada oshirish maqsadida, geologik qidiruv jarayoniga yangi hududlar va chuqur joylashtirilgan majmualarni jalb qilish masalasi ko'ndalang turibdi. Eng istiqbollilari sifatida o'rganish uchun quyidagi yo'nalishlarini ajratish mumkin: neft va gaz konlarini izlash maqsadida – paleozoy qatlamlari (Ustyurt, Buxoro-Xiva va Farg'ona mintaqalari); Surxondaryo viloyatida tuz ostidagi yura qatlamlari; Surxondaryo mitaqasidagi Uchqizil-Mirshodin zonasidagi tegishli qatlamlar; yangi hududlar (O'rta-Sirdaryo depressiyasi va Zarafshon chuquri). 2021 yilgacha bo'lgan davr ichida quyidagi hududlarda geologik qidiruv ishlarini o'tkazishga mo'ljallangan investitsion loyihalarni amalga oshirish belgilangan: Qo'ng'iro't uchastkasida; Boysun va Surxon investitsion bloklari; Xorazm va Meshekli-Tuzkoy investitsion neft-gaz uyumlari mavjud bloklar. Uglevodorodlar bazasini kengaytirish maqsadida respublikada neft va gaz uyumlarini qidirishning an'anaviy yo'nalishlariga zarar yetkazmagan holda noan'anaviy uglevodorodlar manbalarini izlash va o'rganishga qaratilgan tadqiqotlar miqyoslari asta-sekin ortib bormoqda. Belgilangan geologik qidiruv ishlarining amalga oshirilishi 2022 yilga qadar O'zbekiston Respublikasining uglevodorodlar borasidagi salohiyatini 2014 yilda berilgan baholarga nisbatan 1,5 baravarga oshirishga imkon beradi.

Uglevodorod xomashyosini qazib chiqarish tizimiga iqtisodiy jihatdan rentabelli va samarali energetik texnologiyalarni joriy qilish tarmoq faoliyatining o'ta muhim yo'nalishi hisoblanadi. Bunga turli yo'llar bilan erishiladi.

Qator ochilgan neft-gaz konlarini jadal ishga tushirish, noan'anaviy va qazib chiqarilishi murakkab bo'lgan xomashyolarni qazib chiqarish neft-gaz qazib chiqarish korxonalarini faoliyatining ustuvor yo'nalishi hisoblanib, bu o'z navbatida konlarning o'ziga xos xususiyatlarini o'rganishni faollashtirish, unumli qatlamlarni ochish bo'yicha eng samarali texnologik vositalarni tanlash va uglevodorodlar ko'payishini jadallashtirishni talab qiladi. Hozirgi vaqtda, xorijiy

kompaniyalarni jalb qilgan holda, neft qazib chiqarish hajmini ko'paytirishni ta'minlovchi yangi texnologiyalardan keng foydalanish dasturi tayyorlanmoqda.

Respublikani bundan keyin ham gaz bilan barqaror ta'minlash va tabiiy gaz eksportini oshirish uchun yoqilg'ining muqobil turi sifatida suyultirilgan uglevodorod gazini ishlab chiqarish hajmlari o'sishini ta'minlash tarmoq faoliyatining alohida yo'nalishi hisoblanadi. Gazni qayta ishlash sohasi rivojlanishi istiqbollari ham suyultirilgan gaz, kondensat, oltingugurtni ishlab chiqarishni yanada kengaytirish, ham kimyoviy sintez uchun tabiiy gazning barcha resurslaridan chuqurroq foydalanish va yuqori likvidli mahsulotlarni olish bilan bog'liqdir.

Hozirgi vaqtda «O'zbekneftgaz» MXK tizimida tabiiy gazni qayta ishlash yo'nalishida quyidagi korxonalar faoliyat yuritadi: Muborak GQZ, SHo'rtan gaz-kimy o majmuasi va «SHo'rtanneftgaz» USHK. «SHo'rtanneftgaz» USHK propan-butan aralashmasini olishga mo'ljallangan beshta qurilmalarining suyultirilgan gaz bo'yicha bir yillik umumiy quvvati yiliga 250,0 ming tonna, kondensat bo'yicha – qariyb 100 ming tonna, oltingugurt bo'yicha – 5 ming tonnagacha bo'lgan miqdorni tashkil qiladi va bu oltingugurt tozalovchi aminli qurilmasi bilan oksidlangan gazning butun hajmini qayta ishlab, oltingugurtga aylantirishni ta'minlaydi. 2012-2013 yillarda «Muborak GQZ» USHKda gazni qayta ishlash yillik quvvati 4,0 mlrd. M³ ga teng suyultirilgan uglevodorodli gazni ishlab chiqarish bo'yicha uchta qurilma ishga tushirildi. Butun korxonaga bo'yicha esa bir yilda qariyb 240 ming tonna suyultirilgan uglevodorodli gaz va 110 ming tonna barqaror kondensat ishlab chiqariladi.

Tabiiy gaz tarkibidan qimmatbaho komponentlarni yanada chuqur ajratib olish ishlari 2001 yilda SHo'rtan gaz-kimy o majmuasi foydalanishga topshirilganligi bilan bog'liq bo'lib, u yerda ilk bor etan, propan, butan va gaz kondensati bir-biridan ajratilishini ta'minlaydigan tabiiy gazni qayta ishlashning kriogen texnologiyasi qo'llanilgan. Ushbu majmuada ajratib olinadigan etan asosida etilen ishlab chiqarish hamda polietilen mahsulotini ishlab chiqarish yo'lga qo'yilgan. «GTL loyihasini» xom ashyo gazi bilan barqaror ta'minlash maqsadida hozirgi vaqtda «SHo'rtan Bosh inshootlarining qurilmalarini modernizatsiyalash va SHo'rtan-SHGKM BI gaz quvurini qurish» yo'nalishida ishlar olib borilmoqda. SHo'rtan bosh inshootlarining mavjud qurilmalarini qayta ta'mirlash va modernizatsiyalash bo'yicha tashkiliy-texnik tadbirlar ishlab chiqilmoqda, korxonalar bo'yicha mahsulot ishlab chiqarilishining hisob-kitoblari qilindi va sarf-xarajatlar taxminiy baholanmoqda. Propan butan aralashmasini oluvchi qurilma (UPPBS) dan tozalangan gaz SHo'rtan GKMga uzatilishi hisobiga SHo'rtan bosh inshootlarini texnik qayta jihozlash borasidagi chora-tadbirlarning amalga oshirilishi bir yilda etilen ishlab chiqarish hajmini 152,0 ming tonnagacha va polietilen ishlab chiqarish hajmini – 138,0 ming tonnagacha oshirishga imkon yaratadi.

Bundan tashqari, 148 mln.m³ gacha bo'lgan hajmdagi siqilgan gazni sotish (45 ta avtomobil gaz quyish kompressor shaxobchalar (AGNKS)lar orqali) va har

yili avtotransport vositalariga 30 ming donagacha suyultirilgan gaz uskunalarini oʻrnatish (10 ta sertifikatsiyalangan markazlarda) koʻzda tutilgan. Loyihalarning amalga oshirilishi ishlab chiqarilayotgan neft mahsulotlari va 455,5 mln m³ oksidli gazning sifatini oshirish (Yevro 3 va undan yuqori) hamda 2,49 mlrd. dollarlik hajmda mahsulot va xizmatlar eksportini amalga oshirishga imkon beradi.

«2017-2021 yillarda tayyor mahsulot, butlovchi qismlar va materiallarni ishlab chiqarishni mahalliyashtirish dasturi»ni amalga oshirish tarmoq rivojlanishining eng muhim yoʻnalishi hisoblanib, unga muvofiq avval import hisobiga olib kelinadigan tarmoqlararo sanoat kooperatsiyasini kengaytirish mahsulotini ishlab chiqarishni har yili oshirib borib, 2020 yilda 14,7 foizdan 2021 yilgacha 35,5 foizgacha koʻpaytirish koʻzda tutilgan. Dasturga raqobatbardosh import oʻrnini bosuvchi mahsulotlarni ishlab chiqarishni nazarda tutadigan 32 ta loyiha kiritilgan. Ularning amaliyotga joriy etilishi butun tarmoq boʻyicha mahalliyashtiriladigan mahsulot ishlab chiqarish hajmini 2019 yilda 87,793 mlrd. soʻmdan 1042,022 mlrd. soʻmgacha oshirishga imkon yaratadi. Import oʻrnini bosish hisobiga olinadigan samara 200,0 mln. AQSH dollaridan ortadi hamda 1300 ta yangi ish oʻrinlari tashkil etiladi.

Ushbu ijobiy natijalarga erishish, Oʻzbekiston neft-gaz sanoatini barqaror rivojlantirishda, fikrimizcha, eʼtibor quyidagi muammolarni bartaraf etishga qaratilmogʻi lozim:

- ✓ xom-ashyo bazasi holati va uni oshirish;
- ✓ tarmoqning faoliyat turlarini kengaytirish;
- ✓ ishlab chiqarishning barcha boʻgʻinlarida xarajatlarni kamaytirish (qidiruv, qazib chiqarish, qayta ishlash, tashish, saqlash, sotish va boshqalar);
- ✓ ishlab chiqarishda ekologik xavfsizlikni taʼminlash.

Yuqoridagilarga mos ravishda, Oʻzbekiston neft-gaz sanoatini barqaror rivojlantirish quyidagi yoʻnalishlarda amalga oshirilishi maqsadga muvofiq:

- ✓ neft-gaz sanoatidagi operatsiyalarni amalga oshirishni tartibga solishning huquqiy bazasini takomillashtirish; neft va gaz ishlab chiqarishni yangilash va modernizatsiya qilish jarayonlariga investitsiyalar jalb qilishni jadallashtirish;

- ✓ mahalliy neft va gazdan turli xil sintetik mahsulotlar ishlab chiqarish imkonini beruvchi zamonaviy qayta ishlash tizimini rivojlantirish; neft va gaz konlarini aniqlash boʻyicha geografik tadqiqotlarni amalga oshirish;

- ✓ neft va gazdan tayyor mahsulotlar ishlab chiqarish va ularning assortimentini kengaytirish hisobiga eksportni diversifikatsiyalash;

- ✓ milliy tarmoqning jahon neft-gaz sanoatiga integratsiyalashuvini xalqaro darajada ragʻbatlantirish.

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**EFFICIENCY IN TRANSMISSION OF ELECTRICAL ENERGY
METHODS OF INCREASE**

Abstract. In the article, tasks and accuracy classes of high-voltage lines. Also, the problems of reducing the waste of electricity and increasing the efficiency of overhead lines by dividing the phase wires into several wires by reducing the inductive resistance of the power transmission lines are described.

Key words. high voltage lines, phase wires, electrical energy dissipation, power factor, phase separation, transposition, substations, inductive resistance.

Today, the world population's need for energy is increasing day by day. The main reason for this is the sharp increase in world population. Electrification is considered the basis of modern production forces, and accordingly, the high level of production and consumption of electricity in any country means its economic indicators are good and living conditions are good. The electric power transmission system includes substations and transmission lines used for various purposes. Such lines can be overhead lines suspended on special supports above the ground and underground lines buried in the ground. [1]

The voltage of 500-750 kV is transmitted from overhead power lines to the energy system from large power stations located at a great distance, and the energy systems are interconnected. Overhead lines with a voltage of 330 kV and 220 kV make it possible to establish a connection between separate energy systems or to supply large industrial regions located far away with electricity.

Overhead lines with a voltage of 110 kV usually serve to supply the regional substations of the energy system with electricity and to communicate between such substations within the energy system.

Overhead lines with a voltage of 110 kV and 35 kV are intended for providing electricity to remote enterprises or a small group of enterprises located in the same region. Rules for the construction of electrical installations (PUE). All of the above-mentioned power transmission lines are included in class I lines.

Class II lines include overhead lines with a voltage of up to 20 kV (usually 6-10 kV). These lines are used in electrical networks for supplying agricultural centers, settlements, small branches and similar places with electricity.

Class III lines include overhead lines with a voltage lower than 1000 V. [2]

As a result of increasing the voltage of power transmission lines (500-750 kV), their power transmission capacity increases. This requires increasing the cross-sectional area of the wires. Therefore, instead of one wire, several wires are

pulled in a phase. The reason why the phase wires consist of several wires is to reduce the inductive resistance of the power transmission lines, to reduce the waste of electricity, and to increase the efficiency of the air lines. All overhead lines with a voltage of 500 kV are used in several wire phases.

Thus, the phase is branched. For example, three wires are laid on each phase of a line with a nominal voltage of 500 kV as an equilateral triangle with sides of 400 mm. If $U=330$ kV, 2 horizontal wires are drawn from each phase; if $U=750$ kV, 4 wires are drawn. Sometimes 2-wire branched lines are used in lines with $U=220$ kV.

The equivalent radius of branched wires is determined by the following formula

$$R_e = \sqrt[n]{R \cdot a_{sr}^{n-1}}$$

Here:

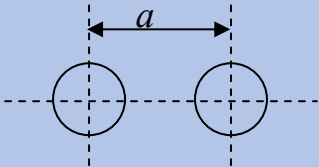
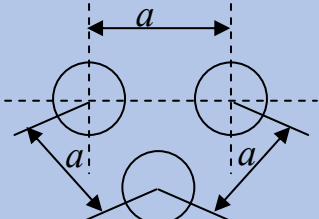
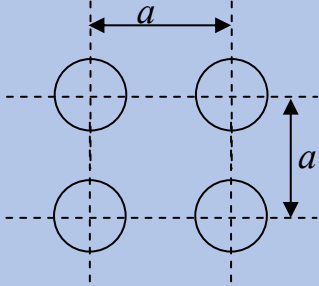
R_e - is the equivalent radius.

R - is the radius of one wire.

a_{sr} - is the average between the wires located in one phase geometric distance.

n - is the number of branch wires in one phase.

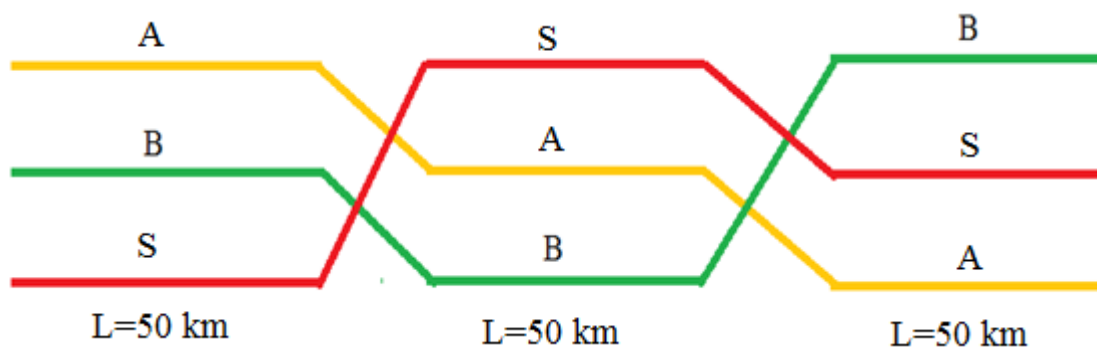
Information on networked wiring is presented in Table 1.

Wiring diagram for each phase.	Number of wires per phase	Equivalent radius	Coefficient K
	2	$\sqrt{2a}$	$1 + 2 \cdot r/a$
	3	$\sqrt{r \cdot a^2}$	$1 + 2 + 2 \cdot \sqrt{3} \cdot r/a$
	4	$\sqrt[4]{r \cdot a^3 \sqrt{2}}$	$1 + 3 \cdot \sqrt{2} \cdot r/a$

In electrical engineering, transposition is a change in the relative position of individual phase wires along the length of an overhead power line in order to

reduce the unwanted effect of power lines on each other and on nearby communication lines. [3]

Transposition of power lines is to change the spatial position of the wires to ensure that their length is equal and, accordingly, the electromagnetic field is equal. When wrapping is done without transposition, the energy losses in the lines are significant.



Phase wiring of open-air power lines is used for voltages of 110 kV and above and line lengths of 100 km or more. This makes it possible to significantly reduce losses in power lines. One of the options for installing wires on the transposition support is shown in the figure.

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MODERN CONSTRUCTION OF ELECTRICAL TRANSMISSION LINES EQUIPMENT WITH ELEMENTS

Annotation. This article deals with the task of sharply reducing energy losses in transmission, distribution and delivery of electric energy, as well as equipping high-voltage lines with modern structural elements.

Key words: power transmission lines, electricity, supports, current and voltage, overhead line, electric voltage, insulators, insulation.

Currently, along with the task of increasing the energy capacity of all energy sources, there is the task of sharply reducing energy losses in the transmission, distribution and delivery of the produced energy. Most of the currently operating power supply systems, including power transmission lines, which are an important part of the power forecasting system, do not work with high efficiency, the power losses in them are higher than the established norm, and frequent accidents occur. The main reason for this is that the power transmission line devices and equipment are outdated, their installation does not meet the requirements. One of the main tasks of the modern electric power sector is the formation of high-efficiency and energy-efficient power transmission lines. [1]

Electric energy is drawn in the open air, and the transmission and distribution facilities are called overhead power lines. Wires are fastened to supports, brackets, wire wood, etc., to insulators and fittings. Air lines are considered for all voltages and are divided into air lines up to 1000 V and air lines above 1000 V according to the characteristics of their construction. Bases and their foundations, insulators, wires, protective cables and line fittings are the main constructive elements of overhead lines.

Insulators. It includes electrical and mechanical stress in different atmospheric conditions. For overhead lines of 6-35 kV, rod or suspension insulators are used, and for overhead lines of 110 kV and above, only suspension insulators are used. The number of insulators depends on the voltage of the overhead line, the type of insulator, the function of the garlands and the type of support. For 110 kV overhead lines, glass PS type suspension insulators as shown in Fig. 1 are used 7 pieces. For normal conditions, the number of PS-type insulators in suspended girdles used on metal or reinforced concrete supports is as follows;

3 units on lines with a voltage of 35 kV.

7 pieces in lines with a voltage of 110 kV.
13 units in lines with a voltage of 220 kV.



Figure 1. General view of PF type insulator

The number of insulators used in such supports is reduced by one or two pieces compared to the number of insulators in the corresponding garlands used in metal supports.



Figure 2. General view of LK-70-110 SHULX type polymer insulator

In order to reconstruct the air line that is currently being designed, instead of the garland insulators of the PF type used in the air line, it is appropriate to choose polymer insulators of the LK-70-110 type, which meet the requirements of the present time, as shown in Figure 2. [3]

Advantages of polymer insulators compared to porcelain PF and glass PS insulators:

1. Good moisture release properties in polluted conditions due to hydrophobicity
2. Significantly lower cost compared to glass insulators in 110 kV overhead line
3. 7-10 times heavier than PF and PS insulators, and 3 times less complicated to install on power lines
4. Low transportation costs due to weight reduction for delivery to any distance
5. Resistance to mechanical effects
6. Ease of transportation
7. Low susceptibility to radio interference compared to PF and PS types.

Table 1. The data of the isolates compared are given below

<i>№</i>	<i>LK-70-110 SHULX type polymer insulator</i>	<i>PF – type garland insulator</i>
1	The price is one set 344598 soums	The price is one set 630,000 thousand soums
2	Works constantly	Permanent external insulation requires control
3	Test voltage 400 kV	Test voltage 400 kV
4	The mass is 12 kg	The mass is 22 kg

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Daminova B.E.
assistant professor
Karshi State University
Orchid Number: 0009-0001-4211-6082
Bozorova I.J., PhD
Karshi State University
Orcid Number: 0009-0009-0699-0125
Zoirova G.S.
student
Razzoqova S.M.
student
Bakhtiyorova M.A.
student
Karshi State University

THE ROLE AND FEATURES OF THE USE OF INFORMATION TECHNOLOGY IN TEACHING A FOREIGN LANGUAGE

Abstract. the article reveals the role and place of information and communication technologies in teaching a foreign language. The importance in the development of students' communicative abilities is considered.

Key words: information technologies, digital technologies, teaching methods, multimedia technologies, development of competencies.

The capabilities of information technologies when used in teaching can be directly related to the processes of teaching a foreign language. Thanks to the use of computers, the involvement of Internet resources in the educational process, and the use of multimedia textbooks, the educational space of foreign language lessons at school is significantly expanded, the prerequisites are created for mastering a large amount of information, carrying out its high-quality analysis, sorting and assimilation.

One of the undoubted advantages of using information technology in the process of learning a foreign language is improving student motivation and creating a situation that promotes an increase in the level of cognitive activity.

In order for the use of information technologies in the learning process to be high-quality and effective, an integrated and comprehensive approach is required, the definition of methodological foundations and clear didactic principles for the use of information technologies in the process of learning a foreign language and, in particular, teaching speaking.

The competent use of information technology in the process of learning a foreign language allows you to create the most effective conditions for the formation and development of communicative competence skills, which is one of the most important prerequisites for the development of speaking skills. Thanks

to the use of computers, a foreign language teacher can create the conditions necessary for the development of communication skills, individualization and differentiation of education, the formation of a sufficient vocabulary, mastery of grammatical skills and assimilation of grammatical patterns and phenomena, increasing reserves for improving the quality of language training, transferring language material to other areas direct speech activity.

As a result of working with a computer, the child's interest in mastering knowledge increases, allowing the teacher to regulate the specifics of solving educational problems in accordance with the degree of complexity and individual capabilities of the child, and the pace of his assimilation of certain educational material. As a result of the use of information technologies, one of the most problematic aspects of organizing foreign language teaching is also being solved - the reaction of children to situations of failure: numerous computer programs not only check the level of development of certain knowledge and skills, but allow them to be trained, allowing the possibility of accessing reference materials included in the composition of such programs. As a result of accessing the relevant sections of the program, the student can fill gaps in knowledge, completing the task based on data from reference materials.

At the same time, the use of information technology makes it possible to combine various working methods, alternate the use of textbook materials and reference literature materials with audio and video materials, and display materials from dictionary entries on the computer screen. Students can also pronounce phrases and sentences in English by recording their voice and subsequently working with this recording in order to correct their pronunciation. Also, audio materials can be used to show students exemplary pronunciation options, reading texts, and organizing listening comprehension. In this way, children are introduced to new texts and examples of speech utterances. Dialogues can be organized in a foreign language, including to practice skills on new topics.

No less useful is the use of information technology as a way to broadcast information about the country of the language being studied: regional information about culture, economy, and characteristics of social development. The capabilities of the Internet make it possible to present children with real video materials about life in the country of the language being studied, and to form an idea of speech activity in the language being studied.

The use of information technology in the process of learning a foreign language is possible at several levels:

- 1) use of information technology in educational activities;
- 2) the use of information technology in the process of organizing extracurricular activities;
- 3) development by the teacher of his own electronic educational resources, which can be used in the process of explaining the material, forming and consolidating the necessary skills;
- 4) increasing the level of pedagogical skills of foreign language teachers;

5) organizing the exchange of experience with teachers in the district, city and region.

The use of information technologies in the process of organizing educational activities includes the following areas of their potential use:

- the use of ready-made computer programs and software solutions in the process of learning a foreign language aimed at developing lexical and grammatical skills and sociocultural competence;
- creation by the teacher of his own computer programs, tests, and other digital resources;
- use of Internet materials in lessons;
- conducting tests online;
- use of Internet materials and websites for holding competitions, olympiads, and seminars held remotely.

To organize the use of information technology in foreign language lessons, there is currently a significant amount of appropriate resources: domestic and authentic foreign language training programs.

The sequence of presentation of materials intended for the formation of certain skills and abilities and their consolidation corresponds to lesson and thematic planning, which makes it possible to include multimedia materials in the content of any of the lessons. Thus, as a result of this structure of applications, they can be used both in the process of organizing lesson activities, and directly as a basis for independent work of schoolchildren at home.

Multimedia technologies make it possible, using various technical hardware, to freely choose the logic of familiarization with information from the knowledge base, to combine information with sound, video and film fragments, with animation and animation. At the same time, they create the opportunity to create various didactic and educational games, computer games, educational and developmental programs. Consequently, the capabilities of information technologies are very diverse and the effectiveness of their use in teaching foreign languages depends on the teacher, his information and professional competence.

The systematic use of ICT opens up great opportunities for using various materials, techniques and teaching aids in foreign language classes, which allows you to intensify the learning process, become a participant in role-playing games, and group discussions.

Thus, a generalization of the features and possibilities of using ICT in the process of learning a foreign language in secondary school allows us to draw the following conclusions. One of the main tasks of studying a foreign language is, first of all, to create the conditions and prerequisites necessary for the development of the communicative culture of schoolchildren, their mastery of a foreign language at a practical level, and overcoming barriers that interfere with direct communication and communicative interaction with native speakers. It is the use of information technology that makes it possible to create appropriate conditions and activate the cognitive activity of each student.

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Daminova B.E.
assistant professor
Karshi State University
Orchid Number: 0009-0001-4211-6082

Bozorova I.J., PhD
Karshi State University
Orcid Number: 0009-0009-0699-0125

Dilmurodov B.B.
student

Musurmonov A.F.
student

Xushmurodov R.I.
student
Karshi State University

THE MAIN ADVANTAGES, PROBLEMS AND DISADVANTAGES OF USING MULTIMEDIA IN TEACHING FOREIGN LANGUAGES

Annotation. Over the past twenty years, specialists in the field of intelligent systems have been conducting active research in the field of creating and using expert systems intended for the field of education. The article discusses the use of expert multimedia systems intended for the education sector.

Key words: education, learning systems, educational technology, multimedia educational information, increasing motivation.

Educational multimedia programs contribute to the integrated structuring of the content components of educational material, independent choice and completion by students of full or abbreviated training options.

Such learning tools contribute to the emergence of not only new opportunities for communication and information transfer, but also opportunities to generate new problems, solutions, new points of intersection, which have a different place in modern culture compared to traditional and well-known media.

The attention of pedagogical science and practice to the model of personality-oriented education is largely connected with the evolution of philosophical views, according to which a person is put at the center of the scientific picture of the world. Personally oriented education is education that:

- focused on the learner as the main value of the entire educational process;
- contributes to the creation of conditions for the formation and manifestation of the personal qualities of students, the development of their thinking, the formation of a creative, active, initiative personality, the satisfaction of the cognitive and spiritual needs of students, the development of their

intelligence, social and communication abilities, skills of self-education, self-development;

- focused on society's need for specialists capable of independently acquiring knowledge, retraining and adapting to new social conditions.

The use of multimedia in teaching allows you to:

- solve the problems of humanization of education;
- increase the efficiency of the educational process;
- develop the personal qualities of students (training, learnability, ability for self-education, self-education, self-training, self-development, creative abilities, ability to apply acquired knowledge in practice, cognitive interest, attitude to work);

- develop the communicative and social abilities of students;
- significantly expand the possibilities of individualization and differentiation of open and distance learning by providing each student with a personal teacher, whose role is played by a computer;

- identify the student as an active subject of cognition, recognize his self-worth;

- take into account the subjective experience of the student, his individual characteristics;

- carry out independent educational activities, during which the student learns and develops himself;

- to instill in the student the skills of working with modern technologies, which contributes to his adaptation to rapidly changing social conditions for the successful implementation of his professional tasks.

The practical implementation of a student-oriented approach using multimedia tools will require the creation and use of modern multifunctional subject-oriented multimedia teaching aids that contain extensive databases, knowledge bases for educational purposes, artificial intelligence systems, expert training systems, laboratory workshop with the ability to specify a mathematical model of the phenomena and processes being studied.

Multimedia is an extremely useful and fruitful educational technology due to its inherent qualities of interactivity, flexibility, and integration of various types of multimedia educational information, as well as its ability to take into account the individual characteristics of students and help increase their motivation.

Providing interactivity is one of the most significant advantages of digital multimedia compared to other means of presenting information. Interactivity refers to the process of providing information in response to user requests. Interactivity allows, within certain limits, to control the presentation of information: students can individually change settings, study the results, and also respond to program requests about specific user preferences. They can also set the delivery rate and number of repetitions to suit their individual academic needs, which is especially important in open education settings.

However, when using multimedia in education, many aspects must be taken into account. Even taking into account the ubiquity of multimedia in the modern world, it must be recognized that the availability of educational materials and hardware for students varies widely.

To fully realize the academic potential of multimedia technologies, students require the support of competent teachers. Among other responsibilities, teachers must be able to guide student learning and provide effective learning strategies.

Multimedia tools can be used in the context of a wide variety of learning styles and are perceived by people with different psychological and age-related characteristics of perception and learning: some students prefer to learn through reading, others through listening comprehension, and still others through watching videos. films.

The use of multimedia allows students to work on educational materials in different ways. In this case, the student has the opportunity to decide how to study the materials, how to use the interactive capabilities of the multimedia application, and how to implement joint work with his fellow students. Thus, students become active participants in the educational process.

The use of high-quality multimedia makes it possible to make the open learning process flexible in relation to social and cultural differences between students and their individual learning styles and paces, and their interests. Individual learning is the implementation of the principle of active, independent learning, in which students themselves choose which questions to answer and which topics to study.

The interactivity of multimedia technologies makes them extremely flexible, which can be very beneficial for students with special academic needs. In particular, people with hearing impairments experience significant improvements in phonological and reading skills when using multimedia in learning, and the visual presentation of information significantly increases the academic motivation of deaf people. People with significant speech impairments and physical disabilities benefit from the use of multimedia in the learning process because the tools can be customized to meet the individual needs of students.

Multimedia teaching aids are promising and highly effective tools that make it possible to provide the teacher with a larger volume of information than traditional sources of information; clearly, in an integrated form, include not only text, graphics, diagrams, but also sound, animation, video, etc.; select types of information in the sequence that corresponds to the logic of knowledge and the level of perception of a specific contingent of students.

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Daminova B.E.
assistant professor
Karshi State University
Orchid Number: 0009-0001-4211-6082

Bozorova I.J., PhD
Karshi State University
Orcid Number: 0009-0009-0699-0125

Eshboltayeva M.M.
student

Shodmonqulova F.O.
student

Shodmonqulova Z.O.
student
Karshi State University

USE OF ONLINE ELECTRONIC DICTIONARIES IN ENGLISH LANGUAGE LESSONS

Annotation. One of the ways to teach a foreign language to a future specialist is training based on training texts. The article discusses the possibilities and advantages of using electronic dictionaries in English lessons, as well as new teaching literature and online dictionaries, which greatly facilitate the learning process.

Key words: English language, online dictionary, lexicographic materials, communicative competence, information flow, mobility, flexibility.

The main goal of using new information technologies is to improve the quality of education. However, living in the age of scientific and technological progress, it is necessary to actively introduce ICT into the educational process, which will allow you to spend the least amount of time preparing a lesson and will facilitate the learning of educational material by students.

The use of electronic dictionaries not only simplifies the search for the necessary lexical units, but also deepens and diversifies English language learning.

Tasks in modern teaching a new language involve the use of various techniques for working with electronic dictionaries. Such tasks involve observing grammatical and lexical phenomena in corpora that interest students in order to immerse themselves in an authentic language environment.

In addition, teachers, when using electronic dictionaries, can check the learned material. For example, compose grammatical and lexical tasks and texts based on authentic materials from online dictionaries, develop projects.

Thus, a teacher or student himself, using online dictionaries, is able to find the equivalent of any lexical unit, translate idioms, terms, proper names and

geographical names, and find the intersections of certain stylistic and grammatical phenomena.

As you know, vocabulary plays an important role in mastering new languages. As the leading component of speech communication, vocabulary interacts with grammar and phonetics. Working with electronic dictionaries is aimed at enriching vocabulary. Working with a dictionary develops in them a desire to independently search for words that are needed for speech activity.

A modern electronic dictionary can be characterized as a flexible interactive system that provides access to arrays of a wide variety of information that goes far beyond the scope of familiar language knowledge.

The text of a computer dictionary gradually changes in the direction from ordinary to heterogeneous, containing the maximum amount of verbal and non-verbal information.

An article in a modern electronic dictionary often has the following content: the meaning of the word, three types of illustration - text, video and audio, two pronunciation options.

For example, in the article you can listen to the verb to ring landline phone ringing. With the help of such innovations, electronic dictionaries contain all sorts of models for their use by teachers and students. This allows you to include electronic dictionaries in the section of educational software.

Electronic dictionaries are an innovation in the field of English language teaching methods. In general, the development of the ability to competently use lexicographic materials is an integral part of learning a foreign language. The technical capabilities of electronic dictionaries make it possible to add new things to learning.

During the learning process, electronic dictionaries perform a number of tasks that are aimed at improving and optimizing the information flow:

- speed;
- efficiency;
- accuracy;
- mobility;
- availability;
- relevance;
- flexibility.

Electronic dictionaries combine large volume with convenience and speed of use. This is achieved thanks to the machine search mechanism

The efficiency of machine systems is the ability to constantly update the dictionary database and create new thematic dictionaries.

This can be used in a foreign language lesson, forming thematic vocabulary in accordance with modular training.

Flexibility is the functionality of the dictionary to adapt to a specific subject area (physics, finance, computer science, business, medicine, law, etc.)

Mobility (the ability to use dictionaries not only on personal computers, but also on other electronic devices (tablet, phone), which will allow you to use the dictionary in any convenient place, having installed software or Internet access.

Accuracy is a stylistically and grammatically correct adequate transfer of the meaning of the source text into the target language. For example, today the leaders in machine translation are two companies: Google and Promt. These programs translate text with high quality, with virtually no human intervention.

The lists of lexical units correspond to the lessons in the corresponding educational materials.

1. For example, the “Mosaic” exercise. Here the student selects a word-translation pair from several options.

2. After “Mosaic”, the “Options” exercise will start. A word is displayed at the top of the window, for which you need to select the correct translation from the options below.

3. After the “Options” exercise, the “Writing a word” exercise will start: you need to remember the translation of the word and write it without errors.

4. Final exercise “Self-test”. The student must try to independently remember the translation of the specified word and only then look for the correct answer.

Thus, the possibilities of using electronic dictionaries show that they are not only a source of high-quality reference material, but also a useful and indispensable modern tool in teaching a foreign language.

Unlike traditional learning, this kind of learning, built on the basis of electronic dictionaries and corpora, makes the learning process creative and interesting.

In conclusion, we note that information technologies are actively used in teaching foreign languages. At the moment, electronic corpora and dictionaries are assigned the place of a tool for the formation of foreign language communicative competence. They contribute to the implementation of a personal-activity approach, the essence of which is to take into account the personal characteristics of each student and focus on independent work.

Information technologies are inextricably linked with improving the quality of the educational process.

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Daminova B.E.
assistant professor
Karshi State University
Orchid Number: 0009-0001-4211-6082
Bozorova I.J., PhD
Karshi State University
Orcid Number: 0009-0009-0699-0125
Mannonova S.A.
student
Sohibova Sh.Sh.
student
Aralova D.S.
student
Karshi State University

APPLICATION OF MODERN INFORMATION AND COMMUNICATION TECHNOLOGIES IN TEACHING ENGLISH

Annotation. The article discusses the need to use digital technologies in teaching a foreign language and increasing motivation among students.

Key words: modern digital technologies, foreign language, motivation, pedagogical technologies in teaching.

Information and communication technologies are increasingly penetrating various spheres of life in modern society. It becomes obvious that in connection with the introduction of information technology into the educational process, the use of a computer would help increase interest in learning English and help organize intercultural communication in the classroom.

The problem of motivation in learning remains relevant today. It is actively studied in such sciences as psychology and pedagogy. There are many factors that influence student motivation.

The current stage of development of society is characterized by the process of informatization, i.e. the use of information as a social product, ensuring the intensification and intellectualization of the main spheres of human activity, the acceleration of the scientific and technological process and the democratization of society. A person who skillfully and effectively masters technology and information has a different, new style of thinking, and has a different approach to assessing the problem that has arisen and to organizing his activities.

One of the directions of informatization of society is the process of informatization of education.

It should also be noted that the use of ICT in English lessons has its positive aspects:

- English lessons that use multimedia applications can motivate students to further learn the language.

- The use of ICT allows students to learn more independently, and thereby increases self-esteem and self-confidence.

- The use of ICT enhances student interaction, verbalization and engagement in collaborative group learning.

Thus, the learning process using information and communication technologies helps to increase motivation for language learning; ICT increases interest in the subject, as the teacher provides various presentations, video and audio materials, thereby increasing students' desire to learn and learn a foreign language.

It should also be noted that, thanks to ICT, it is possible to solve various problems in teaching all types of speech activities. Using various multimedia tools, you can improve the ability to listen to texts for educational purposes to train the perception and understanding of their content by ear.

The use of ICT along with other methods allows students to feel more confident in discussions, while they have the opportunity to expand their vocabulary and achieve good results in their ability to communicate in English.

Modern information technologies open up great opportunities to expand the educational framework in each school subject, and a foreign language is no exception. Learning English today is a creative process. In the study of English, the multimedia potential of new information technologies is used, which shows the high efficiency of using the didactic capabilities of computer technologies.

The use of ICT contributes to the effective solution of the following didactic tasks of teaching English:

- developing skills and abilities to read foreign texts;
- improving listening skills;
- improving reading skills;
- improving the skills of constructing monologue and dialogic statements;
- improving writing skills when preparing various kinds of essays, retellings, abstracts;

- replenishment of vocabulary with vocabulary of modern foreign languages;

- formation of sustainable motivation for foreign language activities with the help of operational materials on the Internet, e-mail, and search engine results.

The computer best influences the structure of the educational process, most fully satisfies didactic requirements and brings the process of teaching English as close as possible to real conditions. Computers can perceive new information, process it in a certain way and make decisions, can remember the necessary data, reproduce moving images, and control the operation of such technical teaching aids as speech synthesizers, video recorders, and tape recorders.

The computer also provides comprehensive control of the educational process. Control, as is known, is an integral part of the educational process and serves as feedback between the student and the teacher. When using a computer to control the quality of students' knowledge, greater objectivity in the assessment is achieved.

Thus, multimedia products can be a powerful motivational factor and attract people to learning. At the same time, the role of the teacher will not become less significant. No amount of the latest technology can replace a teacher in the classroom. The most important thing in a lesson is live communication. The role of the teacher in the educational process is leading, therefore the mechanism of using information technology in learning a foreign language will require increased efforts of the teacher. The effective use of ICT directly depends on the information culture and computer literacy of the teacher. The teacher cannot and should not lag behind the achievements of science and technology; he is called upon to ensure that technical capabilities serve the development of the human soul. Therefore, every teacher is simply obliged to constantly look for new options for conducting a lesson, strive to make each lesson more interesting and exciting so that the lesson material is retained in the students' memory for a long time. One of the ways to achieve this goal is the use of ICT at the stages of preparing and conducting lessons.

The use of ICT in English language learning and teaching is an area that has not yet been fully explored. Both students and teachers can gain a lot from using them. Every aspect of ICT, be it online reading, programs aimed at expanding vocabulary, or computer-assisted speech that improves literacy, provides invaluable knowledge to students of our time. Moreover, we should not lose sight of the motivational value of ICT for students, as well as the fact that ICT is flexible in its use. It is important that teachers know how to use ICT in their classrooms so that they regularly incorporate it into their teaching practices.

It should be noted that the use of ICT saves time. The teacher can plan more work during the lesson. Finally, we will always see ICT as a means by which our students will experience the world, broadening their horizons and understanding that since English is now seen as the language of international communication, they will be able to communicate not only with people from English-speaking countries, but and with the whole world.

The possibilities for using computer technology are endless. They make the teacher's work easier and arouse great interest among students, offer simple and convenient tools for solving a wide range of problems, and provide students with an additional incentive in learning a foreign language.

The use of information technology gives impetus to the development of new forms and content of traditional activities of students, which leads to their implementation at a higher level

The results of using ICT are: improved quality of education, high cognitive activity of students, individualization of learning, development of a creative

approach when performing educational tasks. Today, information and communication technologies can be considered a new way of transferring knowledge that corresponds to a qualitatively new content of child learning and development.

The use of new ICT helps to implement a person-centered approach to learning, promotes individualization and differentiation of learning, taking into account the abilities of children, their level of training, intensifying independent work of students, increasing cognitive activity and motivation, increasing the volume of completed tasks, and the opportunity to show creativity.

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Daminova B.E.
assistant professor
Karshi State University
Orchid Number: 0009-0001-4211-6082
Bozorova I.J., PhD
Karshi State University
Orcid Number: 0009-0009-0699-0125
Panjiyeva S.T.
student
Urinova M.N.
student
Xolmurodova F.R.
student
Karshi State University

SOFTWARE TOOLS FOR CREATING MULTIMEDIA RESOURCES IN TEACHING ENGLISH

Annotation. Today, the creation of high-quality and effective electronic educational resources is one of the main tasks in the field of informatization of education. Graphic text is being replaced by highly interactive, multimedia-rich electronic educational resources.

Keywords: multimedia components, electronic educational resources, content, textbook, electronic textbook, multimedia application, programs.

After creating all the multimedia components, you need to combine them into a single multimedia application. This raises the problem of choosing a software tool for its development. Existing means of combining various multimedia components into a single product can be divided into three groups:

- algorithmic languages for direct development of control programs;
- specialized programs for creating presentations and publishing them on the Internet (quick preparation of multimedia applications);
- proprietary multimedia tools.

It is also especially important to take into account the interactivity and multimedia richness of electronic educational resources, since a student may have at his disposal a set of traditional textbooks, and a copy of these textbooks in an electronic version is unlikely to arouse his interest.

Unlike the classic “paper” version of the textbook, the electronic textbook is intended for a different learning style, in which there is no focus on sequential, linear learning of the material. The educational information text of the electronic textbook must be clearly hierarchically constructed in terms of content. The top level of the hierarchy reflects the main concepts and concepts of the subject area. Lower levels must consistently detail and specify these concepts. Definitions,

examples, objects, and statements must be clearly defined. Multi-level will allow you to study the subject with varying degrees of depth.

A textbook is the main teaching tool, “a book intended for teaching a specific academic subject, containing a systematic presentation of knowledge that is subject to mandatory mastery by students.”

An electronic textbook is more of a tool for teaching and learning, and its structure and content depend on the purposes of its use. He is a tutor, a simulator, and a self-teacher. It acquires particular significance when used in linear technologies and communication systems.

The chosen topic of the thesis “Creation of electronic educational resources for children with disabilities in the subject is relevant due to the fact that there is undoubtedly a need for such an electronic textbook, and there are either no electronic textbooks in this discipline at all, or their number is extremely not enough.

The modern educational process, taking place in the conditions of informatization, requires a significant expansion of the variety of teaching aids.

This division is quite arbitrary, because many tools have the ability to create program modules in a scripting language. As a rule, the choice of tool is based on the requirements for the efficiency of the multimedia application and the speed of its development. The degree of user interaction is also an essential requirement. Specialized presentation programs are primarily focused on transferring information from the computer to the user. Authoring tools enable a high degree of interaction and create a truly interactive application.

Developing a multimedia application in any algorithmic language requires knowledge of programming, although modern visual programming environments are supplemented with various wizards for creating individual interface elements that allow you to automatically obtain program code. In this case, the time spent on development will be significant, but the resulting application will be optimal in terms of use of computer resources and speed of operation.

Custom tools can significantly shorten the development process, but result in a loss in the efficiency of the application being created. In addition, development requires a good knowledge of the capabilities of this tool and effective methods of working with it.

Formula Graphics Multimedia System - provides the preparation of multimedia programs that work in interactive mode.

The simplest and fastest way is to use presentation creation programs, the capabilities of which in some cases are sufficient to create a simple multimedia application.

Presentation creation programs. Programs originally designed to create electronic slides to help illustrate a speaker's message are now becoming increasingly multimedia oriented. There are a large number of such programs, differing in the range of visual and animation effects.

Macromedia Director - used for creating presentations and multimedia products. This software product supports MMX technologies and allows you to work with buttons, slides, clips, animation, etc.

PowerPoint is a presentation program included in the Microsoft Office suite. In terms of the number of visual and animation effects, it is not inferior to many author's multimedia tools. Contains tools for creating a flexible presentation script and recording audio for each slide. The presence of a Russian version allows you to successfully work with texts in Russian. Built-in web support allows you to save presentations in HTML format, but animated components require the installation of the special PowerPoint Animation Player add-on. Allows you to create complex program add-ons in the Visual Basic for Application programming language, which significantly expands the capabilities of the program. The Custom Soundtracks Add-In complements your presentation with background music with a wide selection of melodies.

Macromedia Action - builds a presentation as a single sequence of elements or as an interactive show consisting of many individual scenes, which are called up using on-screen buttons. Tools are provided to set the appearance time and duration of each element's presence on the screen, as well as their animation. However, it does not have tools for creating images and video clips

Corel Presentations is a Corel program for creating slide shows. Allows you to create high-quality presentations of all types, including those with multimedia components. For image editing it includes a Graphics Editor. The updated Web Publishing Wizard takes just a few steps to transform your presentation into the format you need to post it on your Web site. Import-export tools allow you to convert your development to the format of presentation applications from other companies.

Teachers and students are not the developers of multimedia resources used in education. Most often, teachers and students act as users of such tools. However, practice shows that every year an increasing number of teachers cannot stay away from the development of, albeit simple, electronic teaching tools. In this regard, it is advisable for a modern teacher to have an idea of both the technologies for developing high-quality multimedia resources and the hardware and software tools for creating computer teaching aids.

1. Various HTML editors are widely used to create many simple multimedia resources.

2. Teachers and students can use other tools to create multimedia resources. There are many multimedia development tools available that allow you to create rich multimedia applications. Packages such as Auto Play Media Studio, Macromedia Director or Authware Professional are highly professional and expensive development tools, while FrontPage or HyperStudio are their simpler and cheaper counterparts. Tools such as PowerPoint, Publisher, and word processors (such as Word) can also be used to create simple multimedia resources.

Here it is also necessary to use tools for preparing multimedia objects (graphic and music editors, tools for creating animation objects, digitizing information).

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Daminova B.E.
assistant professor
Karshi State University
Orchid Number: 0009-0001-4211-6082
Bozorova I.J., PhD
Karshi State University
Orcid Number: 0009-0009-0699-0125
Pirnazarov A.A.
student
Qo`chqorova G.G.
student
Sattorova J.Sh.
student
Karshi State University

ADVANTAGES OF USING MULTIMEDIA RESOURCES IN ENGLISH LANGUAGE LESSONS

Annotation. The article describes the possibilities of using multimedia technologies in teaching foreign languages and points out the advantages of using multimedia presentations.

Key words: multimedia presentations, multimedia technologies, educational process, software.

Modern communication-oriented education prepares students to use a foreign language in real life.

The use of multimedia interactive technologies in communicative teaching of a foreign language significantly improves the quality of presentation of lesson material and the effectiveness of students' learning of this material. As practice shows, the use and implementation of modern technologies and multimedia equipment enriches the content of the educational process and increases motivation to study English language skills on the part of the children and there is close cooperation between the teacher and students. Multimedia technologies involve the use of audiovisual and interactive teaching aids such as:

1) software (multimedia discs, presentations, video, audio clips, Internet resources);

2) equipment (PC, audio, video equipment, multimedia projector, interactive whiteboard).

Multimedia is data or content that is presented simultaneously in different forms: sound, animated computer graphics, video. For example, one container object may contain, in addition to text, audio, graphic and video information, and also, possibly, a method of interactive interaction with it. This is achieved using a specific set of hardware and software.

Multimedia Internet resource is a site in which basic information is presented in the form of multimedia. This is a modern and very convenient mechanism that does not replace classic functions, but complements and expands the range of services and news for visitors.

Multimedia Internet resources are characterized by:

- may contain various types of information (not only text, but also sound, graphic, animation, video, etc.);
- high degree of visibility of materials;
- support for various file types: text, graphics, audio and video;
- the possibility of using it to promote creative works in the field of various arts.

A resource of this type makes it possible to quickly report on events that are being organized, demonstrate an overview of an area, institution or creative team, establish feedback with your visitors, reveal goals and materials using modern mechanisms for presenting information and promote recognition of the presented object via the Internet.

Interactive learning based on multimedia programs allows you to more fully implement a whole range of methodological, didactic, pedagogical and psychological principles, makes the learning process more interesting and creative. The ability to take into account the levels of language proficiency of students is the basis for the implementation of the principles of individualization and a differentiated approach to learning.

At the same time, the principle of accessibility is observed and the individual pace of work of each student is taken into account.

The use of multimedia teaching aids is a natural stage in the development of pedagogical technologies. Nowadays, there are many multimedia teaching tools available. They are designed to teach speech activities: reading, writing, listening, speaking; explanation and repetition of various grammatical material with appropriate tasks and exercises, both for independent learning and work in a group.

Using multimedia presentations in lessons to develop communication skills has a number of advantages. One of the main advantages is the ability to provide students with the correct answers in writing after completing assignments. You can invite students to write down some facts, phrases, sentences, based on clarity, which makes the process easier for many students correct spelling. And in the future, these recordings can be used for discussions and monologues on the topic, as well as when doing homework.

Another positive result of using presentations is a faster pace of the lesson and student interest.

The teacher can use developments created independently, for example, presentations in PowerPoint. This program is also convenient for students performing creative design work with subsequent demonstration to an audience.

The advantages of project work have been known for a long time and are used in the teaching methods of various school subjects, including a foreign language.

Traditionally, studying a topic or section ends with repetition, consolidation and generalization. All these elements can be combined by inviting students to create a multimedia project at the final stage of each topic. By creating a presentation, students are given an excellent opportunity to systematize acquired knowledge and skills, their practical application, as well as the opportunity to realize their intellectual potential and abilities. It is very important for students to feel an interest in independent creative work, to feel the significance of the results of their work, because presentation is ready-made teaching material for the lesson, and also to feel your own success.

When developing lessons, teachers often face the problem lack of handouts with assignments. This problem can be solved using multimedia presentations. The content of presentations can be different: video hints, additional information, text tasks, diagrams, tables.

The most common way to create multimedia presentations is using the Microsoft Office Power Point application. This software is very popular and has become widespread among users. Its advantages, of course, include ease of use and the ability to create multimedia presentations of any degree of complexity. In the educational process, multimedia presentations allow you to conduct a lesson more efficiently. It should be noted that with the advent of presentations, the teacher's time to prepare for the lesson has been reduced, since there is no need to prepare visual aids.

Multimedia presentations are widely used when organizing and conducting extracurricular events, such as Olympiads and scientific and practical conferences in a foreign language. They allow you to clearly demonstrate creative performances and reports, attract the attention of listeners, and highlight certain points. Multimedia presentations allow you to develop monologue speech, since during his speech the speaker uses certain keywords and tables that he developed independently. Working on creating a presentation, first of all, develops reading skills, since when selecting the necessary material you have to read a large number of printed materials. Listening skills are also developed by listening to the speaker deliver a presentation. In this case, listening is combined with visual support. Creating a multimedia presentation also involves developing reading skills.

The use of multimedia presentations undoubtedly has many advantages, but we should not forget about their appropriateness and timeliness. The information presented may not be entirely in visual form. When supplying material, dosage is necessary. Simply reading information from the screen is not effective for perception and does not provide an understanding of the main thing. The effective use of multimedia technologies is possible with systematic application, high-quality selection of material and proper preparation.

Thus, the use of information and communication technologies makes learning fun, allows for a more interesting and visual presentation of educational material, and also motivates students to independently study this material.

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Daminova B.E.
assistant professor
Karshi State University
Orchid Number: 0009-0001-4211-6082

Bozorova I.J., PhD
Karshi State University
Orchid Number: 0009-0009-0699-0125

Turaeva G.N.
student

Husanova G.Z.
student

Uroкова S.U.
student
Karshi State University

USING COMPUTER PRESENTATIONS IN TEACHING FOREIGN LANGUAGES

Annotation. This article discusses the use of modern technologies for effective teaching of a foreign language. The advantages of using the PowerPoint program for teaching a foreign language are analyzed.

Key words: foreign language, learning, new opportunities, modern technologies, interactive learning, PowerPoint program.

The development of modern technologies provides new opportunities for effective teaching of foreign languages. A variety of computer programs make the process of mastering a foreign language fun and productive, as they help create a situation of high motivation. The variety of Internet resources provides the opportunity to widely use various services to develop the necessary linguistic skills. Living conditions in our time place special demands on university graduates. And this, in turn, increases the responsibility of higher educational institutions for the quality of training of specialists.

Using a computer in the classroom gives good results: it develops the creative and research abilities of students, increases their activity; contributes to the intensification of the educational process, helps the development of students' cognitive activity and interest in the subject; develops logical thinking in students, significantly increases the level of reflective actions with the material studied in class. The computer can be used at all stages of learning: when explaining new material, consolidating, repeating, monitoring knowledge, skills and abilities. ICT accelerates the learning process; contribute to a sharp increase in student interest in the subject; improves the quality of material absorption; allow you to individualize the learning process; make it possible to avoid subjective assessment.

The specificity of a computer as a teaching tool is associated with its characteristics such as complexity, versatility, and interactivity. Using a computer, you can organize individual, pair and group work in the lesson. However, it must be remembered that a computer cannot replace a teacher in the classroom. It is necessary to carefully plan your time working with a computer and use it exactly when it is really needed.

Today at the process of teaching, in particular foreign languages, requires changes not only in the content of the material taught, but also the use of modern technologies, methods and forms of teaching. In this article we consider the possibilities of using the Microsoft PowerPoint computer program when teaching foreign languages.

The MS PowerPoint program is a specialized automation tool for creating and designing presentations designed to visually present the artist's work to a group of other people. The program ensures the development of electronic documents of a special kind, characterized by complex multimedia content and special reproduction capabilities. MS PowerPoint allows you to develop the following documents:

Key features and tools of PowerPoint:

1. Creating new presentations using the auto content wizard, as well as the wizards for creating a title slide, slides, notes and handouts.

2. An extensive set of layouts and design templates for individual slides and presentations in general.

3. Possibility of arbitrarily changing the content and design of slides and presentations.

4. The ability to create your own presentations (without using templates and wizards), as well as your own slide and presentation templates.

5. A set of tools for managing presentation display

6. Possibility of including various animation and multimedia effects in the presentation demonstration.

MS PowerPoint documents are written in special format files with extensions.ppt,.pot and.pps. The.ppt extension is assigned to files containing a presentation under development, the.pot extension to files containing a presentation template, and the.pps resolution to files containing a completely finished presentation.

PowerPoint has become one of the most common teaching tools today.

The study allowed us to draw the following conclusions:

1) the use of the computer program PowerPoint when teaching foreign languages to engineering students at a university is possible and very successful, as it allows teachers to use visualization not only to increase motivation for the discipline being studied, but to build skills and develop abilities in the main types of speech activity in a foreign language language;

2) during the experiment and subsequent analysis of student questionnaires, it was revealed that a certain percentage of students do not know how to work

with the information presented on the slides, so we consider it advisable to teach students, and also, possibly, teachers who have difficulty organizing their classes when using the computer program PowerPoint;

3) the PowerPoint computer program is a tool for presenting information, stimulating and maintaining interest and motivation for the lesson, and not an element replacing the teacher, therefore, abandoning traditional forms (board and marker), in our opinion, is impossible, since the leading role in explaining the material is given to specifically the teacher.

The use of computer presentations makes the teacher's work easier in the classroom: it saves a lot of time, makes it possible to provide additional interesting material, and increases the effectiveness of the lesson, but creating a presentation also requires painstaking preparatory work.

As practice shows, having basic computer literacy, a teacher is able to create original educational materials that captivate, motivate and target students for successful results in the PowerPoint computer program.

There are a number of benefits to a PowerPoint presentation:

- combination of various text audio and video visualizations;
- the possibility of using the presentation as a kind of interactive, multimedia board, which allows you to more clearly semantize new lexical and grammatical (and possibly phonetic) material, as well as provide support for teaching all types of speech activity;
- the possibility of using individual slides as handouts (supports, tables, diagrams, graphs, diagrams, collages, printouts on paper, etc.);
- the ability to control students' attention through animation effects and hyperlinks;
- the ability to use various forms of organizing cognitive activity (frontal, group, individual);
- activating the attention of the whole class; maintaining the cognitive interest of students, enhancing learning motivation, as well as the effectiveness of perception and memorization of new educational material;
- monitoring new knowledge and systematizing the studied material;
- saving study time.

The purpose of a lesson presentation could be:

- updating knowledge;
- accompaniment of the teacher's explanation of new material;
- primary consolidation of knowledge;
- generalization and systematization of knowledge.

Presentation slides can be used during explanations, reinforcement, or to create a problematic situation in the lesson. The selection of material for a presentation must comply with the principles of science, accessibility, and clarity. The most productive presentations have proven to be those in which, after explaining or presenting the material, exercises for consolidation or control are

inserted. Students do these exercises directly from the screen individually or frontally. The ability to show the correct answer allows you to organize peer- or self-test quickly and efficiently.

Thus, a creative approach allows the teacher to make the most effective use of a very important tool in his work - the computer, represented by modern computer educational technologies. The use of computer educational programs in the process of teaching English does not interfere with the solution of a communicative task, but, on the contrary, increases its effectiveness, since the teacher can build a lesson that could most effectively achieve the set educational goal.

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Daminova B.E.
assistant professor
Karshi State University
Orchid Number: 0009-0001-4211-6082
Bozorova I.J., PhD
Karshi State University
Orcid Number: 0009-0009-0699-0125
Murodova O.U.
student
Menglieva Z.A.
student
Tuychieva S.R.
student
Karshi State University

USING THE GOOGLE CLASSROOM WEB SERVICE AND PREPARING INTERACTIVE PRESENTATIONS

Annotation. Creating a distance learning course using the Google Classroom web service. Creating practical skills for preparing interactive presentations for electronic boards. It is thought that the IPBOARD interactive whiteboard has a special software, different from a regular school board, and has a number of conveniences under this software, and the interactive electronic whiteboard is considered as an additional device for personal computers.

Key words: Google Classroom, web service, distance learning course, electronic board, interactive presentation, information technologies, information and technology, learning process.

How to use Google Classroom. Using Google Classroom

- From a computer
- From smartphone and tablet

Google Classroom is a free platform developed by Google, available in the form of a web application (so it can be accessed by anyone using a browser and mobile phones that allows teachers and students to easily share, assign / give different types of learning materials and application for tablets).run online assignments and release / view received grades in real time.

G Suite for Education and it is only available to students belonging to institutions enrolled in the program mentioned above. Later, the service was opened to everyone, allowing any user with an account Gmail to create and participate in courses and lessons, although there are some restrictions: if the teacher You work in a real school and the students in your class you want to use Classroom to teach. This institution must be enrolled in G Suite for Education and have both Teacher and Student Gmail accounts associated with it.

Another feature of Google Classroom is its integration with other Google services integration: learning material can be created and distributed together with tasks and related solutions.

IPBOARD electronic board.

The IPBOARD electronic board was developed by Julong Educational Technology Co., Ltd (Julong) in 2008 and is now widely used in the field of education, business and military. This interactive whiteboard is one of the latest combinations of digital technologies. IPBOARD interactive whiteboard has a special software, unlike a regular school board, and under this software it has a number of conveniences. An interactive whiteboard is an additional device for personal computers. With its help, it is possible to edit, display, create and print presentations, texts and pictures using a computer and a projector. IPBOARD interactive whiteboard is an electromagnetic display. It works as part of a system together with a computer and a projector.



Figure 2. The principle of operation.

The interactive whiteboard works like a monitor and allows you to control the computer when additional hardware and software are activated. In this, electronic markers are used as an auxiliary tool.

An electronic marker is a computer accessory that acts as a mouse. (Figure 3). For example, to draw a straight line, it is enough to touch the marker to the surface of the interactive whiteboard. The function of the right mouse button is performed by a special button of the electronic marker.



Figure 3. Electronic marker.

Electronic markers are used for making presentations and using the board on the IPBOARD electronic board. The difference between these electronic markers and ordinary markers is that it is possible to create a context menu through it. Normal markers do not have this option. It is also possible to write printed notes in programs with the help of electronic markers. For this, —Ekrannaya keyboard is used. (Figure 4).

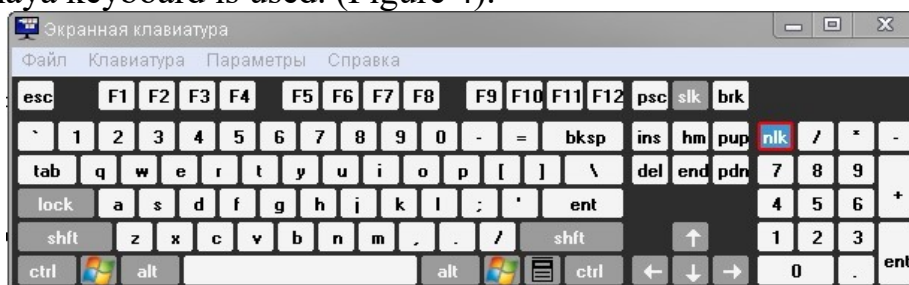


Figure 4. On-screen keyboard.

The electronic board is a very convenient tool to use, especially in the process of distance education. In this case, we can show our presentations in several auditoriums at the same time. We can see this process through the topological diagram below. (Figure 5). Topological diagram.

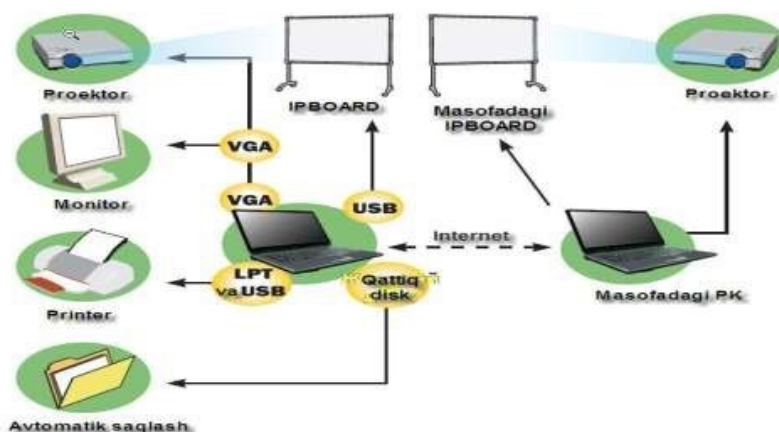


Figure 5

Topological diagram for working with remote IPBOARD circuit board.

With the help of this diagram, we can see that our presentations can be seen by a number of people who cannot fit in one audience. To use this feature, you must be connected to the Internet. With the help of analog and multimedia

devices, we will be able to show our presentations to everyone from one place at the same time, anywhere on the planet. In this case, we need the Internet to facilitate the switching process in the middle. Computers communicate with each other through the computer's IP address (IP-address - computer's address on the Internet). (For more information about this process, see the "Configuring remote access" section of the "Help" file.)

The main components of the IPBOARD electronic board are as follows.

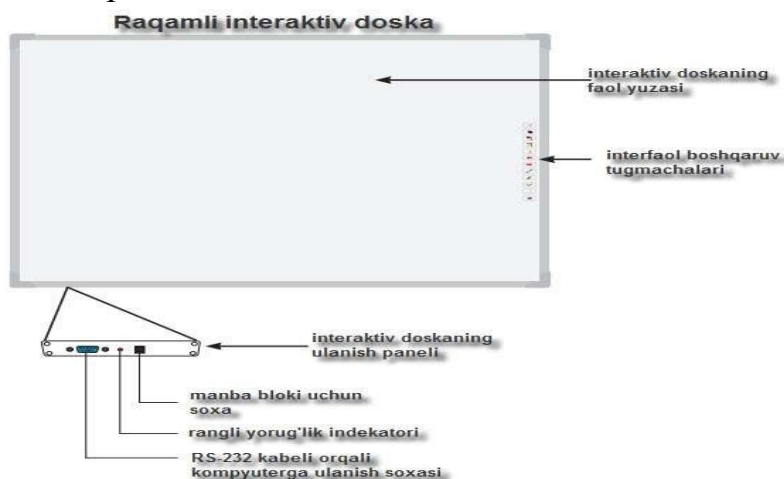


Figure 6. The main components of the electronic board.

Installing IPBOARD software. Minimum requirements for computer hardware and software for installing IPBOARD electronic board software. - type of computer: computer - Pentium III, processor with a clock frequency of 800 MHz and higher, - working memory: 128 Mb and higher, - a minimum of 112 Mb of free space on the hard disk is required, - installed operating system: Windows 98, Windows 2000, Windows XP, Windows 2003, Windows Vista. If our computer meets the above requirements, we can start installing the software. The installation process is carried out in the following order. → To install IPBOARD software on a computer, insert the software disk into a DVD-ROM or CD-ROM device. The computer will automatically read the disc and the screen shown in Figure 7 will appear.



Figure 7. Installation home page.

To install the software, press "Install IPBOARD Software" button. Select the installation language and press the —Next> button. (Figure 8)

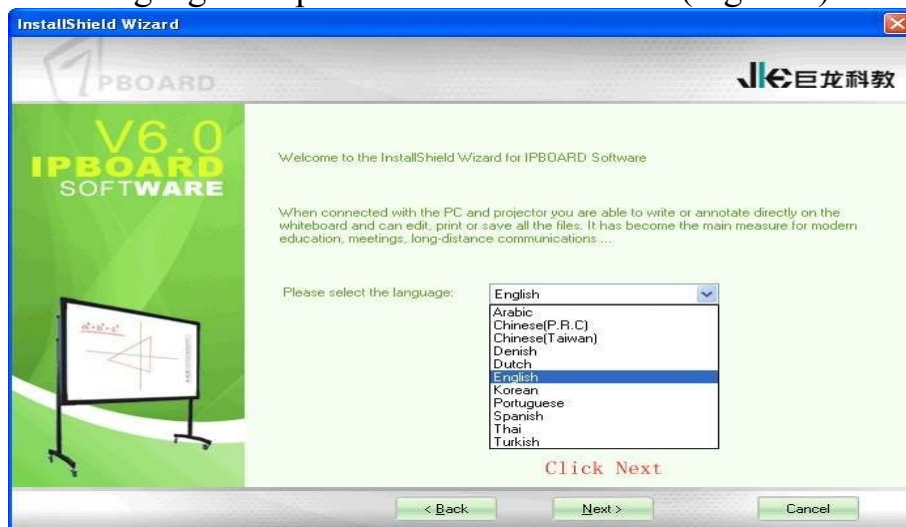


Figure 9. Select the installation language.

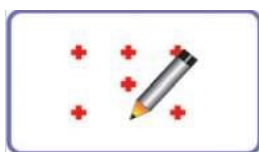
Specify the installation location of the IPBOARD program and click the "Next" button to start the installation. (Figure 3)

Based on the same sequence, the USB port driver and board drivers are installed. For this, it is necessary to select and install —Install IPBOARD driver> and —Install USB driver> items.

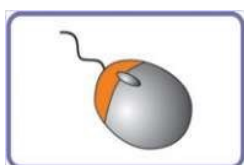
Instructions for using the electronic whiteboard are given in the User Guide section. After installing the software and board drivers, it will be possible to control the computer, work with pages, edit data, and print using the interactive control function keys on the right side of the electronic board.

Features of the electronic whiteboard function keys The teacher uses these function keys when teaching using the IPBOARD electronic whiteboard. These buttons allow you to perform several actions directly on the board itself during the lesson.

These are interactive control buttons and their main functions are as follows:



The button for specifying the working area is used to specify the working area of the electronic board. The more precise the marker used, the more accurate the movement of the marker.



The control mode button allows you to control the computer and perform the tasks performed by its peripheral device, the mouse. To do this, you need to go to the computer control mode.



Comment mode. It is sufficient to use the comment mode when creating new presentations. When the annotation mode is added, it will be possible to automatically edit the information on the screen. By starting the presentation in the IPBOARD program, the user goes to the control mode to perform actions on the data on the computer

pass is required.

When any equipment for applications (pen, marker) is started in the IPBOARD program panel, the program will automatically transfer the information on the screen to the first page of the presentation in the form of a picture. Applications on the computer screen (notes).

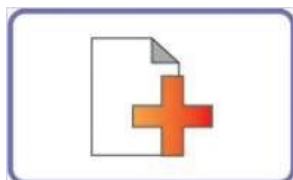
In the IPBOARD program, the electronic board can be displayed not only with an electronic marker, but also with a mouse.



Window mode. When this mode is selected, the working window of the IPBOARD software tool appears on the board. In this working window, it will be possible to work as a school board during lessons.

It will be possible to create a presentation, work with notes, work with images, delete and save written information, edit them, and print them. Another convenience of the working window is a variety of colored pencils for text editing and processing

in the availability of access.



The Create New Page button is used to create a new page on the board. In this case, the previous pages are not deleted, but are kept above. We can refer to the above pages at any time. The number of new pages that can be created is not limited, that is, we can create as many new pages as we want.

This is especially useful for large-scale presentation.

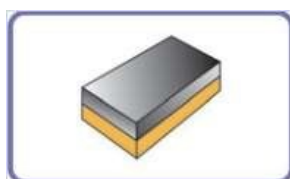


Clicking the function button to go to the top page will go to the top page from the current page. This is a function key to move from the current page to the previous page in the presentation

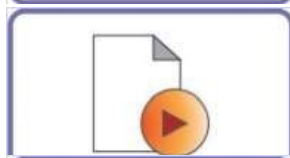
The next page event occurs when the page down or next page button is clicked.

This function button is also very useful in presentations.

The function of this function button is to perform the tasks performed by a regular pen. The pen allows you to draw notes, texts, pictures and graphic objects. The ability to write in the usual colors and thicknesses of the controllable function key



The Eraser tool is used to erase unwanted text, images, and objects from a window. The size of the eraser can be changed to any size



The refresh button will display the preset on the page again. Page slides did not show automatically when this button was activated. All completed tasks and actions are displayed in sequence.



A device that prints digital data onto a solid medium (usually paper). The printer control function button allows you to print the information on the page from the printer. In this case, a printer must be connected

to the computer. The IPBOARD software tool provides a number of functions that make working with the board more convenient.



Tez A scrolling panel. The moving panel is moved to the right and left parts of the page using an electronic marker. This is necessary in order not to destroy the data in the window. This floating panel will appear in the window after the software is launched. We can call this movable panel as toolbar. A panel contains a number of

devices and these devices can be added or removed from the panel at will by the user. For this panel

you need to select the desired equipment from the menu and add it to the equipment panel without releasing the mouse button. The menu item of the panel includes tools for drawing geometric figures, such as a ruler and a circle. This is another example of the fact that the electronic board is a useful tool in the course of the lesson.



Working with remote users.

IPBOARD electronic board also uses the function of working with remote users. In this case, the universal kit equipment helps to connect with the remote board. This is especially useful during conferences and distance education. After a brief setup and setup when working with a remote whiteboard, audio and video signals are also transmitted to users when multimedia tools are installed.

Color interface.

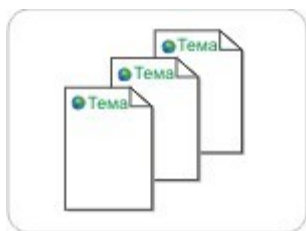
IPBOARD Software uses a different color interface. Users will have the opportunity to choose a color that is convenient for them when working with the board. In this, the user is given the opportunity to choose 3 different types of colors.

Multi-user interface.



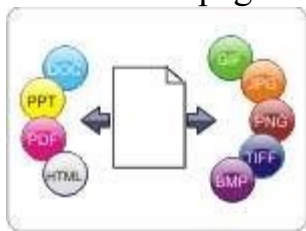
When working with the IPBOARD electronic board, it is possible to create a personal name (login) and password for each user. In this case, the user creates his own user account, and all changes and restrictions are controlled by that user. In order to create a user account, click the IPBOARD of Julong Educational Software from the computer's "push" menu.

You need to start the User Manager application from the Software section. Page theme.



If it is required to put a subheading on all pages of our presentation, the page theme function "Topic pages" is used in the IPBOARD program. Various objects, images, text and applications can be used in a page theme. The page theme can be unique for each page, or

the same for all pages.

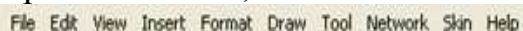


Ability to quickly export to other formats. Applications created in IPBOARD can be quickly exported to other software applications:

- for graphic objects (tiff, jpeg, gif, bmp, png);
- for Microsoft Office programs (doc, ppt); - in PDF;

- in HTML.

Also, after launching the whiteboard software, the whiteboard window appears when window mode is selected from the scroll bar. There are 10 menus at the top of the screen, which are as follows.



-File, Edit, View, Insert, Format, Draw, Tool, Network, Skin and Help menus.

These menus are designed to perform some of the same functions as the menus of Microsoft Office programs. At the bottom of the menu bar is the toolbar, which looks like this.



Among these devices, elements are placed in order to save time when performing data saving, copying, creating a new page, eraser, pen, text and a number of other actions.

It is possible to use the elements of this toolbar without switching to the window mode of the scrolling panel. For this, in the computer control mode of the electronic board, the desired item is selected by pressing the electronic marker once from the menu item on the panel, and the necessary equipment can be used.

In short, it can be said that the organization of the educational process with the help of the IPBOARD board and its software leads to effective results. Using its function keys and software toolbars, any subject can be efficiently organized in an interactive way.

In short, the development of science and technology today presents a number of new tasks to pedagogues: information technologies determine how the educational process should be, how information is presented, in what size and form.

Therefore, the most basic, even the first task, it is necessary to ensure that approaches to the educational system, technical tools, as well as new methods of educational technologies are accessible and understandable to teachers and technical specialists who provide the educational process.

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Daminova B.E.
assistant professor
Karshi State University
Orchid Number: 0009-0001-4211-6082

Bozorova I.J., PhD
Karshi State University
Orcid Number: 0009-0009-0699-0125

Arziyeva K.S.
student

Tursunova S.N.
student

Sunnatova H.R.
student
Karshi State University

USING DIGITAL TECHNOLOGIES IN FOREIGN LANGUAGE LESSONS

Annotation. The use of new information technologies in teaching English is one of the most important aspects of improving the educational process, enriching methodological tools that allow you to diversify the forms of work and make the lesson more interesting for students.

Key words: information technology, training, educational process, methodological tools, lesson, students.

Currently, modern digital technologies are penetrating all areas of human activity. The desire to actively use them in the educational sphere and, in particular, in teaching foreign languages is aimed at increasing the level and quality of training of future specialists.

The development of a modern digital educational environment, which today has enormous opportunities for improving the quality of education, has become very relevant.

The formation of a digital educational environment in schools is a necessity, because the task of the school is to prepare a comprehensively developed graduate with the necessary set of competencies and competencies, ready to continue his education in a highly developed information society.

Penetration of digital technologies into the educational process (use of modern computer and peripheral equipment, capabilities of the local and global Internet, multimedia network educational complexes, electronic learning tools and corresponding classes of information software systems) creates the prerequisites for a radical update of both content-target and technological aspects of training.

The goal of developing the school's digital educational environment is to ensure high quality education. It helps develop children's learning independence and responsibility, and provides students with various tools for productive activities. Gives you the opportunity to gain knowledge on your own, as well as navigate large amounts of information. When using interactive forms of learning, the student himself opens the way to the acquisition of knowledge, and the teacher is an assistant in this situation, and his main task is to organize and stimulate the educational process. The Internet provides a diverse array of software and communications capabilities. I will name some of them:

1. A good example of such a web service, which is quite competitive in the modern world, is an electronic whiteboard. The electronic board is designed for quick collaborative creation of an interactive lesson. Here you can attach notes, photos and videos (including from your device's camera), texts, links to external resources, etc.

2. Quizziz is a very simple and free web platform, a tool for quickly creating original electronic educational resources, which has a number of educational opportunities and advantages. The service interface is in English. The platform allows you to create interactive tasks of various types ("kahoots"): test - Quiz, discussion - Discussion, questionnaire - Survey or sequence - Jumble. You can embed videos and images into mini-exercises. To add a competitive effect, a timer is added to the questions, which allows students to form universal educational actions of self-regulation and self-control. After the teacher has created the test, a code is automatically generated to enter the survey, students open the downloaded application, enter the code, and answer the questions using a mobile phone, tablet or computer. However, students do not need to create their own accounts. The teacher can download the class results in the form of a table. Quizziz has an extensive library of public tests created by users of the platform and open to everyone. The service is completely free.

The use of digital educational resources in foreign language lessons allows you to:

- improve the efficiency and quality of education;
- focus on modern learning goals;
- increase students' motivation to learn;
- take into account the regional aspect;
- make lessons interesting and memorable;
- implement an individual approach;
- objectively assess students' knowledge.

It should be noted that the use of digital educational resources makes it possible to effectively organize independent work of students and contributes to the formation of a free, active and independent personality.

Foreign language lessons using digital educational resources are much more interesting and effective.

Numerous studies in the field of introducing IT into the educational environment confirm that their system integration develops students' communication skills of the 21st century, namely creativity and innovative thinking, multiple intelligences, developed thinking, information, visual, audio, technical literacy, effective communication (oral, written, digital), the ability to work in a team and coordinate joint activities, the ability to design, and also provides solid knowledge and developed skills, promotes the integration of communicative and meta-subject skills of students.

In conclusion, I would like to say that the combination of traditional teaching methods with new ones using digital technologies makes it possible to increase the level of achievement and quality of knowledge of students in foreign language lessons.

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Daminova B.E.
assistant professor
Karshi State University
Orchid Number: 0009-0001-4211-6082
Bozorova I.J., PhD
Karshi State University
Orcid Number: 0009-0009-0699-0125
Tog'ayeva R.T.
student
Tajibayeva A.K.
student
Zokirova L.O.
student
Karshi State University

USE OF ELECTRONIC EDUCATIONAL RESOURCES IN THE PROCESS OF TEACHING A FOREIGN LANGUAGE

Annotation. The intensive development of information technologies and their introduction into the education system intensively influence the development of the personality of a modern child. One of the main parts of informatization of education is the use of information technologies in educational disciplines.

Keywords. modernization, educational process, information and communication technologies, electronic educational resources, programs, technical means.

Modernization of the educational process involves, first of all, updating and improving its content. Therefore, special attention is paid to creating conditions for the development of students' creative personal potential and expanding the opportunities for in-depth education, including language education.

At the moment, information technologies, for example, electronic educational resources (EER), significantly expand the capabilities of not only teachers and specialists in the field of education, but also all participants in the educational process.

The possibilities of using various electronic educational resources, in particular in English lessons, make it possible to most fully and successfully realize the development of the student's abilities. Unlike conventional technical teaching aids, electronic educational resources allow you to develop intellectual and creative abilities, as well as develop the ability to independently acquire new knowledge.

Electronic educational resources are becoming an integral part of the modern lesson. EERs provide assistance in learning English, since their use creates a unique opportunity for students in this subject to use authentic texts,

audio recordings, various tests and other game and interactive tasks, thus creating a natural language environment.

An electronic educational resource is a set of software, information, technical, regulatory and methodological materials, full-text electronic publications, including audio and video materials, illustrative materials and catalogs of electronic libraries, located on computer media and/or on the Internet.

The potential of electronic educational resources creates the prerequisites for its practical implementation adequate to the specifics of studying a specific discipline, in particular, the academic discipline "Foreign Language".

When selecting and including electronic educational resources for teaching English, I relied on the principles of the activity approach, which presupposes the need to provide conditions for active independent learning activities of students. So in the educational process I use the following types of electronic educational resources: demonstration materials (illustrations, photographs, posters, presentations, diagrams with text support), interactive tables, rules, educational dictionaries.

Building an educational process using electronic educational resources is a form of educationally productive activity for students who perform certain actions with ICT reference tools, interactive tables, and educational dictionaries. Forms of work using Microsoft Power Point presentations in foreign language lessons include: learning vocabulary, teaching dialogic and monologue speech, practicing grammatical phenomena. They allow you to train various types of speech activity and combine them in different combinations, help to understand linguistic phenomena, form linguistic abilities, create communicative situations, automate language and speech actions, and also provide the ability to take into account the leading representative system, implement an individual approach and intensify independent work. The introduction of the Microsoft Power Point program into the educational process does not at all exclude traditional teaching methods, but is harmoniously combined with them at all stages of training: familiarization, training, application, control.

Computer programs provide the introduction of educational material, modeling of communication situations, organization of game tasks, control and assessment of knowledge, allowing the use of all types of visualization. Exercises for classes on the local network (sound and text tasks) are offered for implementation, when working with which students use a computer as a tool for educational activities. Control of knowledge acquisition in thematic sections of the discipline is carried out when performing test tasks in testing programs.

When completing classroom assignments, students search for the necessary language information on the Internet, which helps to enhance the independent activity of students. The global Internet makes it possible to create conditions for obtaining any information necessary for participants in the educational process.

In conclusion, it must be said that electronic educational resources are an invariable component of the information and educational environment. The

introduction of electronic educational resources in English lessons contributes to the development of students' creative abilities, leads to business cooperation between teachers and students, and provides great opportunities and prospects for independent creative and research activities. Despite the listed advantages of electronic educational resources, we should not forget about the possible oversaturation of the educational process, which contributes to a decrease in the perception and assimilation of educational material. Thus, only the joint use of both traditional and electronic educational tools will help lead to maximum results in teaching a foreign language.

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Daminova B.E.
assistant professor
Karshi State University
Orchid Number: 0009-0001-4211-6082
Bozorova I.J., PhD
Karshi State University
Orcid Number: 0009-0009-0699-0125
Urinova S.A.
student
Abdiyeva M.S.
student
Xushvaqtova M.Sh.
student
Karshi State University

**SCIENTIFIC AND METHODOLOGICAL SUPPORT OF
EDUCATIONAL INFORMATION INTERACTION IN THE
EDUCATIONAL PROCESS BASED ON INTERACTIVE ELECTRONIC
EDUCATIONAL RESOURCES: USING THE EXAMPLE OF
TEACHING ENGLISH**

Annotation. Informatization of education, the tasks of which is to provide the education sector with the theory and practice of creating and optimal use of scientific, pedagogical, educational, methodological, software and technological developments focused on realizing the capabilities of information and communication technologies (ICT), makes its own adjustments to the educational process, creating conditions for interactive information interaction both between the teacher and students, and with the source of a distributed information resource for educational purposes.

Key words: innovative technologies, ICT, Internet technologies, interactivity, learning process, Internet resources, innovation.

In the educational process, a special place is given to the need to use ICT tools (educational complexes for conducting business games based on information technology, electronic textbooks and dictionaries, reference books and educational databases, presentation graphics programs, etc.) to develop language skills among future specialists in order to implement professional activity. However, they do not fully address the issues of developing these skills using electronic educational resources (EER).

In addition, research by scientists in the field of developing language skills in a foreign language, including those based on ICT, indicates the effectiveness of developing these skills in a group when performing game exercises. The use of ICT in the educational process leads to increased motivation to master language

skills, increased efficiency and strength of vocabulary memorization, achievement of a higher level of knowledge and skills, and expanded opportunities for mastering speech skills.

The most commonly used ICT tools in the educational process include: electronic textbooks and manuals demonstrated using a computer and a multimedia projector, electronic encyclopedias, reference books, simulators and testing programs, educational Internet resources, DVDs and CDs with pictures and illustrations, video and audio equipment.

Those who study and teach English as a foreign language have significant advantages over those who study other languages as a subject of study. The share of the English-language sector of the Internet has significantly exceeded the rest since the very beginning of the creation of the World Wide Web.

Internet resources can be defined as a means of teaching the new generation. Most of these resources are currently multimedia in nature. They can combine text materials with graphic, audio and video recordings. It is well known that modern education requires different approaches that are designed to increase its effectiveness. The use of various technical means and modern technologies in the English lesson allows us to reduce the time required to present the necessary information and facilitate the presentation of educational material.

Modern technologies and Internet resources make it possible to make the process of mastering the English language lively and vibrant, turning a lesson into a journey through the countries of the language being studied.

If we consider language competence, then the formation, respectively, of lexical and grammatical skills can be significantly helped by lexical and grammatical games (vocabulary and grammar games). Along with language games, speech games are also used, that is, games aimed at developing speech skills (listening, reading, writing and speaking). Particularly valuable are games whose goal is to develop skills in productive types of speech activity: speaking and writing. The so-called productive skills games are applicable at all stages of teaching English at school. As you know, game teaching methods are created and applied by a game teacher. This profession is now officially called the profession of the future.

Internet resources are able to satisfy the needs of users in various fields of activity, including education, and their use in the learning process as alternative, modern means of teaching will create an effective “fusion” of new pedagogical technologies with the latest information technologies, designed to increase the effectiveness of the educational process.

In addition, the widespread use of the Internet makes learning English more accessible and interesting. Internet resources allow you to create interactive tasks that help students work through the material effectively.

One new method of language acquisition is “teleconference,” which is remote video communication between several parties. Of course, it is impossible to implement this method of communication without the Internet. A live broadcast

is conducted between students from different countries, where they can easily communicate, thereby not only meeting new people, but also learning the language and culture of another country. This method also increases motivation to learn the language. Thus, the student will listen to foreign speech and learn new words.

Modern technologies optimize the process of teaching English and make it better. Currently, there is a huge selection of educational resources, the teacher can choose the method of presenting information, the process becomes more creative, and eliminates routine. With the help of ICT, it is possible to rationally use both classroom and extracurricular time, but do not forget that a computer cannot replace a teacher, therefore, when planning a lesson, it is necessary to clearly define the time and place of use of computer technology.

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Daminova B.E.
assistant professor
Karshi State University
Orchid Number: 0009-0001-4211-6082
Bozorova I.J., PhD
Karshi State University
Orcid Number: 0009-0009-0699-0125
Badritdinova F.T.
student
Botirova Sh.Sh.
student
Sattorov Sh.Q.
student
Karshi State University

METHODOLOGICAL ASPECTS OF THE USE OF INTERACTIVE DIGITAL TECHNOLOGIES IN TEACHING A FOREIGN LANGUAGE

Annotation. To characterize the features of the use of information technologies in the process of teaching speaking in foreign language lessons, it is necessary, first of all, to define information technologies themselves. Within the framework of modern science, in particular, there are many theoretical approaches to defining this term. Due to the fact that it consists of two words, the term “information technology” (IT) is defined on the basis of two corresponding concepts: information and technology.

Key words: information technologies, theoretical approaches, information and technology, object and subject of education, learning process.

For each sphere of human activity and professional development, there are both general and special technologies that allow one to achieve a certain result and achieve the goals of the activity. In this regard, pedagogy defines educational technologies. Educational technologies are one of the varieties of human science technologies based on general concepts and features of the philosophical, psychological, pedagogical approach, concepts of management and didactics.

The term “technology” is defined as a word derived from two Greek roots “techne”, which means “art”, “skill”, and “logos” - “teaching”, “knowledge”, “concept”. Taking into account the above, the very concept of “technology” is defined as a body of knowledge about various means, methods and tools for implementing processes, as a result of which a qualitative change in the state of an object is carried out.

The concept of information comes from the Latin root “information”, translated into Russian as “presentation”, “explanation”). In the Big Encyclopedic Dictionary it is defined as follows: information is initially a set of information

transmitted from one person to another in oral or written form, as well as using elements of any sign system, conventional signs, understandable to both the sender and the recipient of information messages. Information can also be transmitted using any technical means, which is especially typical for the characteristics of the communication space of the modern world.

Within the framework of computer science as a science, information technology is considered as a specific process that uses a set of available means, tools and methods for collecting, processing, storing and transmitting information in order to organize the further process of obtaining information of a new quality and property about the state of processes or phenomena.” The immediate goal of information technology is the organization of the process of producing information for its subsequent analysis and assimilation by a person and making certain decisions or performing a certain action based on the information received.

Thanks to the use of computers, the involvement of Internet resources in the educational process, and the use of multimedia textbooks, the educational space of foreign language lessons at school is significantly expanded, the prerequisites are created for mastering a large amount of information, carrying out its high-quality analysis, sorting and assimilation.

One of the undoubted advantages of using information technology in the process of learning a foreign language is improving student motivation and creating a situation that promotes an increase in the level of cognitive activity.

In order for the use of information technologies in the learning process to be high-quality and effective, an integrated and comprehensive approach is required, the definition of methodological foundations and clear didactic principles for the use of information technologies in the process of learning a foreign language and, in particular, teaching speaking.

The competent use of information technology in the process of learning a foreign language allows you to create the most effective conditions for the formation and development of communicative competence skills, which is one of the most important prerequisites for the development of speaking skills. Thanks to the use of computers, a foreign language teacher can create the conditions necessary for the development of communication skills, individualization and differentiation of education, the formation of a sufficient vocabulary, mastery of grammatical skills and assimilation of grammatical patterns and phenomena, increasing reserves for improving the quality of language training, transferring language material to other areas direct speech activity.

As a result of working with a computer, the child’s interest in mastering knowledge increases, allowing the teacher to regulate the specifics of solving educational problems in accordance with the degree of complexity and individual capabilities of the child, and the pace of his assimilation of certain educational material. As a result of the use of information technologies, one of the most problematic aspects of organizing foreign language teaching is also being solved - the reaction of children to situations of failure: numerous computer programs

not only check the level of development of certain knowledge and skills, but allow them to be trained, allowing the possibility of accessing reference materials included in the composition of such programs. As a result of accessing the relevant sections of the program, the student can fill gaps in knowledge, completing the task based on data from reference materials.

At the same time, the use of information technology makes it possible to combine various working methods, alternate the use of textbook materials and reference literature materials with audio and video materials, and display materials from dictionary entries on the computer screen. Students can also pronounce phrases and sentences in English by recording their voice and subsequently working with this recording in order to correct their pronunciation. Also, audio materials can be used to show students exemplary pronunciation options, reading texts, and organizing listening comprehension. In this way, children are introduced to new texts and examples of speech utterances. Dialogues can be organized in a foreign language, including to practice skills on new topics.

Thus, a generalization of the features and possibilities of using ICT in the process of learning a foreign language in secondary school allows us to draw the following conclusions. One of the main tasks of studying a foreign language is, first of all, to create the conditions and prerequisites necessary for the development of the communicative culture of schoolchildren, their mastery of a foreign language at a practical level, and overcoming barriers that interfere with direct communication and communicative interaction with native speakers. It is the use of information technology that makes it possible to create appropriate conditions and activate the cognitive activity of each student.

Thus, modern information and communication technologies occupy an increasingly important place in the life of a modern person. This makes their application in various fields a natural process and does not raise questions. Education cannot bypass these processes either. The competent use of information technology in the process of learning a foreign language allows you to create the most effective conditions for the formation and development of communicative competence skills, which is one of the most important prerequisites for the development of speaking skills.

The competent use of information technology in the process of learning a foreign language allows you to create the most effective conditions for the formation and development of communicative competence skills, which is one of the most important prerequisites for the development of speaking skills. Thanks to the use of computers, a foreign language teacher can create the conditions necessary for the development of communication skills, individualization and differentiation of education, the formation of a sufficient vocabulary, mastery of grammatical skills and assimilation of grammatical patterns and phenomena, increasing reserves for improving the quality of language training, transferring language material to other areas direct speech activity.

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*Davlatova D.
Shahrisabz davlat pedagogika instituti
Geografiya fani o'qituvchisi
Geografiya va iqtisodiy bilim asoslari
Boboqulova D.
1-bosqich talabasi*

GEOGRAFIYANI O'QITISHDA INTERFAOL METODLARDANFOYDALANISH

Annotatsiya. Ushbu maqolada maktab o'quvchilariga geografiya darslarida foydalaniladigan o'yinlar va interfaol metodlar hamda ularga to'g'ri ta'lim berish haqida fikr yuritilgan.

Kalit so'zlar: interfaol metodlar, intellektual salohiyat, pedagogik texnologiyalar, «Charxpalak», «Bumerang», «Zanjir o'yini», «Musbat, manfiy, qiziqarli (MMQ)», «Yelpig'ich», «Location» metodlari.

*Davlatova D.
Geography teacher
Shahrisabz State Pedagogical Institute
Basics of geography and economic knowledge
Bobokulova D.
1st stage student*

USE OF INTERACTIVE METHODS IN TEACHING GEOGRAPHY

Annotation. this article reflects on the games and interactive techniques used in geography lessons for schoolchildren, as well as the correct education for them.

Keywords: interactive methods, intellectual potential, pedagogical technologies, methods «Carpenter», «Boomerang», «Chain Game», «positive, negative, interesting (MMQ)», «sail», «Location».

Mamlakatimizda zamon talabiga mos yuksak intellektual salohiyatli, zamonaviy bilim va malakaga ega, yangicha dunyoqarash va mustaqil fikrli mutaxassislar tayyorlash uchun beqiyos imkoniyatlar yaratilgan. Ta'lim jarayonini sifatli tashkil etish, o'quvchilarni zamon talablariga mos ravishda ta'lim-tarbiya berish uchun avvalo, o'qituvchi o'z kasbini etuk mutaxassisi, kuchli bilim, iste'dod, tajriba, hamda o'quv mashg'ulotlarida zamonga mos ta'lim usullaridan qanchalik to'g'ri foydalana olayotganligiga bog'liqdir. Hozirgi axborot makonining globallashuvi, ommaviy axborot vositalari kengayib borayotgan bir paytda o'qituvchilarimiz tinimsiz izlanishlari, o'z bilim, ko'nikma va malakalarini oshirib borishlari shart. Davrimiz taraqqiyotiga hamohang

ravishda ilm xazinasi yanada boyib, yoshlarning intellektual salohiyati ortib bormoqda. Endi o'qituvchi o'rganiladigan mavzu mazmunidan kelib chiqqan holda o'qitish vositalari va metodlar orqali pedagogik faoliyatini tashkil etib, o'quvchilarning o'quv-bilish faoliyatini tashkil etish xarakterini belgilaydi. Ayniqsa, geografiya fani o'qituvchilari o'quv jarayonida dars samaradorligini oshiradigan pedagogik texnologiyalardan foydalanish bilan birgalikda axborot kommunikatsion texnologiyalardan samarali foydalanishlari o'rinlidir. Zamonaviy ta'limni tashkil etishga qo'yiladigan muhim talablardan biri ortiqcha ruhiy va jismoniy kuch sarf etmay, qisqa vaqt ichida yuksak natijalarga erishishdir. Bugungi kunda bir qator rivojlangan mamlakatlarda o'quvchilarning o'quv va ijodiy faolliklarini oshiruvchi hamda ta'lim-tarbiya jarayonining samaradorligini kafolatlovchi pedagogik texnologiyalarni qo'llash borasida katta tajriba to'plangan bo'lib, ushbu tajriba asoslarini tashkil etuvchi metodlar interfaol metodlar nomi bilan yuritiladi.

Hozirda yangi metodlarni yoki innovatsiyalarni ta'lim jarayoniga tatbiq etish haqida gap borganda interfaol usullarining o'quv jarayoniga qo'llanishi tushuniladi. Interfaollik bu o'zaro ikki kishi faolligi, ya'ni o'quv-biluv jarayoni o'zaro suhbat tariqasida dialog shaklida yoki o'quvchi-o'qituvchining o'zaro muloqoti asosida kechadi. Interfaol ta'lim usullari o'quvchilarning nafaqat o'qituvchi bilan, balki bir-biri bilan ham keng aloqada bo'lishiga, o'quv jarayonida o'quvchilar faoliyati ustunligiga qaratilgan. Ta'lim-tarbiya tizimi orqali zamon talabiga javob beruvchi sog'lom va barkamol avlodni voyaga etkazish, ko'p jihatdan o'quv fani o'qituvchi va pedagoglarining kasbiy mahoratiga, ularning o'quv mashg'ulotlari jarayonida innovatsion pedagogik texnologiyalardan samarali foydalana olishlariga bog'liqdir. Ta'lim-tarbiya jarayonida pedagogik texnologiyalarni muvaffaqiyatli qo'llash uchun Geografiya o'qituvchilari maxsus metodik bilim va ko'nikmalarni egallashlari, pedagogik amaliyotda zarur bo'ladigan metodik tayyorgarlikka ega bo'lishlari lozim. Geografiya o'qituvchisi darsda o'rganiladigan mavzuning ta'limiy, tarbiyaviy va rivojlantiruvchi maqsadlari va pedagogik texnologiyalarning didaktik funksiyalarini hisobga olgan holda qaysi texnologiyadan foydalanishini ilmiy-metodik asosda tanlagandagina ko'zlangan maqsadga va samaradorlikka erishadi.

Interfaol usullar o'quv jarayonini faollashtirish va bilimlarni yanada qulayroq qilish, shuningdek, o'quv ma'lumotlarini tahlil qilish va o'quv materialini o'zlashtirishga ijodiy yondashishga yordam beradi. Hozirgi kunda geografiyani o'qitish metodlari o'qituvchi va o'quvchilarning o'zaro hamkorlik faoliyatini bir-biri bilan chambarchas bog'langan, tartibga solingan tizim sifatida qarashni talab etmoqda. Geografiyani o'qitishda samarali natijalarga erishishning asosiy yo'li - metod va usullardan ijodiy tarzda foydalanishdir. Geografiya darslarida interfaol va audiovizual o'qitish vositalaridan yangi narsalarni o'rganish va o'tilgan materialni mustahkamlashda foydalanish mumkin. Geografiya darslarini va sinfdan tashqari ishlarni qiziqarli va ijodiy tashkil etish geografiya o'qituvchisi

oldidagi asosiy vazifalardan biridir. Darsda geografik o'yinlardan foydalanish muhim o'rin egallaydi.

Geografiya ta'limi jarayonida «Charxpalak», «Bumerang», «Zanjir o'yini», «Musbat, manfiy, qiziqarli (MMQ)», «Yelpig'ich», «Location» kabi bir necha interfaol metodlardan foydalanish mumkin. Ushbu darslarda o'quvchilarning bilim olish jarayonida o'yin faoliyati bilan uyg'unlashtiriladi. Bunday metodlar yordamida o'quvchilar puxta bilim egallaydilar, mustaqil fikr yuritadilar. Quyida biz geografiya ta'limida qo'llaniladigan shunday ta'limiy o'yinlarning ayrimlariga to'xtalib o'tamiz.

«Charxpalak» metodi - O'quvchilarni dars jarayonida mantiqiy fikrlash, o'z fikrlarini mustaqil ravishda erkin bayon eta olish, o'zlarini baholash, yakka va guruhlariga ishlashga, boshqalar fikriga hurmat bilan qarashga, ko'p fikrlardan keraklisini tanlab olishga o'rgatadigan metodlardan biri. Geografiya fani dars mashg'ulotlarining barcha turlarida dars boshlanishida yoki dars oxirida yoki o'quv predmetining biror bir bo'limni tugallaganda, o'tilgan mavzularni o'quvchilar tomonidan o'zlashtirilganlik darajasini baholash, takrorlash, mustahkamlash maqsadlarida qo'llaniladi.

«Bumerang» metodi - o'quvchilar dars jarayonida, darsdan tashqarida turli adabiyotlar, matnlar bilan ishlash, o'rganilgan materialni yodida saqlab qolish, so'zlab berish, fikrlarni erkin holda bayon eta olish, qisqa vaqt ichida ko'p ma'lumotlarga ega bo'lish hamda dars mobaynida o'qituvchi tomonidan barcha o'quvchilarni baxolay olishga qaratilgan.

«Zanjir o'yini» metodi - o'quvchilarni xotirasini mustahkamlaydi, fikrni bir joyga jamlashni o'rgatadi. Ushbu metoddan o'tilgan mavzularni takrorlashda qo'llaniladi. O'quvchilarni 4ta guruhga bo'lib o'lib, har bir guruhdan 1 o'quvchi doskaga chiqadi. 1-o'quvchi fanga oid atama aytadi, keyingi o'quvchi oldingi o'quvchi aytganini va o'zinikini qo'shib aytadi. Undan keyingisi oldingi 2ta o'quvchi aytgan atamalarga yana o'zi yangisini qo'shib aytadi. O'yin shu tariqa davom etadi. Adashgan o'quvchi o'yindan chiqib ketadi, eng oxirida o'yindan chiqib ketmay qolgan o'quvchi rag'batlantiradi.

«Musbat, manfiy, qiziqarli (MMQ)» metodi-geografiya ta'lim jarayonida o'quvchilarning ma'lum voqelik, hodisa yoki jarayonning barcha jihatlariga e'tibor qaratish, ularni salbiy jihatlarini baholash, qiziqarli tomonlarini aniqlash va kengaytirishga doir ko'nikma va malakalarini rivojlantirishda samarali sanaladi. Bunda asosiy e'tibor mavjud vaziyatning barcha ijobiy jihatlarini inobatga olishga qaratiladi. O'rganilayotgan vaziyat yuzasidan xulosa chiqarish, qaror qabul qilish faqat u batafsil o'rganib chiqilgandan keyingina amalga oshirilishi mumkin. Ko'p hollarda bir qarorga kelishni talab qiladigan vaziyatlarda ham ushbu metodni qo'llash maqsadga muvofiqdir. MMQ metodi bir vaqtning o'zida o'quvchilar faoliyatini o'rganish va baholash metodi ham hisoblanadi.

«Yelpig'ich» metodi-muammo xarakterdagi mavzularni o'rganishga qaratilgan. Bunda mavzuning turli tarmoqlari bo'yicha bir yo'la axborot beriladi.

Ayni paytda, ularning har biri alohida nuqtalarda muhokama etiladi. Masalan, ijobiy va salbiy tomonlari, afzallik va kamchiliklari, foyda va zararlari belgilanadi. Ushbu metod orqali o'quvchi mavzu yuzasidan xulosa chiqarishni o'rganadi.

«**Location**» **metodi**-mazkur metod orqali xaritalardagi ob'ektlarni boshqa bir obyektlarga nisbatan joylashgan o'rniga qarab o'rganishni talab etadi. Biz bu metod orqali o'quvchilarga xaritalar hamda atlaslarni oson va qiziqarli tarzda o'rgatishimiz mumkin. Ushbu metoddan nafaqat o'quvchilar, balki geografiya fani ixlosmandlari foydalanishi mumkin. Qo'llashdan maqsad o'quvchilarni mustaqil fikrlashni oshirish, xotirasini mustahkamlash, ko'plab ma'lumotlar orasidan keraklilarini tanlab olish va guruh bo'lib ishlashni o'rgatadi.

Ta'lim metodlarida o'qituvchining qiyofasi, uning dunyoqarashi, ruhiy pedagogik, uslubiy va maxsus ilmiy tayyorgarligi aks etgan bo'ladi. Xuddi shu omillar ta'lim metodlari samaradorligini belgilaydi. Muayyan metodga yaxshi tayyorgarlik ko'rmagan o'qituvchida shu metodning o'zi salbiy jihatlarini ham namoyon qilishi mumkin, shu sababli ta'lim metodlarini samaradorligini oshirish uchun o'qituvchining tayyorgarlik darajasi muhim ahamiyatga ega. Metodlarni noto'g'ri tanlash o'quvchilarning bilim va ko'nikmalarini sustegallashga sabab bo'ladi. Demak ta'limda universal metod yo'q. Shu tufayli ham o'qituvchi faqat bitta metoddan foydalanib darso'tmaydi. Geografiya ta'limining eng muhim xususiyati shundan iboratki, o'qituvchi aksariyat darslarni o'tishda og'zaki bayon metodlarini qo'llaydi va samarali natijalarga erishadi.

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Davronbekov B.

assistant

Tashkent University of architecture and civil engineering

THE LEVEL OF PHYSICAL PREPARATION OF THE EFFECTIVENESS OF TECHNICAL-TACTICAL MOVEMENTS OF VOLLEYBALL C HILAR

Abstract. In this article, the scientific and practical experiences of local and foreign scientists in the field of sports on the technical-tactical and physical development of young volleyball players, scientific-theoretical information presented in the sources of scientific literature are studied. By analyzing the training process of young volleyball players, modern methods of developing their technical-tactical and physical fitness were used in the research process. Scientific-theoretical opinions on the control of the level of preparation were put forward and scientific research works were carried out, the results obtained from the research were comparatively analyzed and appropriate conclusions were drawn.

Key words: Explosive force, operational force, technical-tactical training, annual training, research group, control group, training exercises.

Modern volleyball belongs to the type of sports games that require extreme speed and great effort. In order to be worthy of high technical and tactical skills, first of all, the physical qualities of volleyball players must be perfectly developed.

The modern volleyball game requires a lot of physical and technical preparation from the player, to act with accuracy throughout the game, because lack of proper physical preparation leads to ineffective completion of all actions on the field, unsuccessful team performance.

However, during the annual competitions, the problem of optimizing training sessions was left aside. The fact that volleyball competitions consist of many «rounds» requires us to have an optimal program to ensure that the players are at a high level of physical and psychological preparation for each «round».

Due to the density of «tours» during the competition, players are required to develop high level of physical fitness and technical-tactical skills in order to prepare for each «tour».

Relevance of the study.

A number of experts have recommended their method to increase the quickness of volleyball players. But currently, in the training of volleyball players, little attention is paid to the aspects of quick-strength qualities related to technical-tactical actions. First of all, it is necessary to pay great attention to the correct distribution of training loads and the development of quick-strength qualities from

the initial stage of specialization. In order for volleyball players to perform at a high level, it is necessary to develop well the various systems of the body.

The purpose of the research: to improve the effectiveness of technical-tactical training of young volleyball players during the annual training period and to study its connection with physical training.

the scientific research is to improve the effectiveness of the technical and tactical training of young volleyball players during the annual training period and to study its connection with physical training.

In order to determine the dynamics of the effectiveness of technical-tactical actions of young volleyball players during the annual training period, observations were made during training sessions and friendly matches.

Before the study, control tests on the physical training of the experimental and control groups were taken and the following results were obtained.

the experimental group 30m before the study. to run 4.8 seconds on average, 400 meters 69.2 seconds, standing long jump 186 centimeters, 30m. 5.3 in the run with the ball, 77 in the footy, 29.7 meters in the long kick with the right foot and 24.4 meters in the kick with the left foot. They also showed a result of 14.2 meters when throwing the ball from the outside (Table 6).

The control group exercised 30m before the study. to run 4.9 seconds on average according to the standard of control, 68.6 seconds for running 400 meters, standing long jump 187 centimeters, 30m. 5.3 in the run with the ball, 72.7 in the footy, 29.3 meters in the long kick with the right foot and 24.3 meters in the kick with the left foot. They also showed a result of 14.2 meters in throwing the ball from the outside. (Table 1)

Tests for the assessment of physical and technical-tactical training of the experimental group before the study (Table 1)

No	FISH.	30 m. run to	400 m run	Standing long jump	Running with a ball for	Playing the ball by hand	Throwing the ball far		AUT
1	Abbasov Muhammadrizo Ravshan Ogli	5.0	70	190	5.3	51	30	20	14
2	Son of Akbarov Adhamjon Valijon	4.8	70	180	5.4	62	28	22	13
3	Bahadirov, son of Murodjon Bahrom	4.7	72	185	5.5	95	31	23	15.5
4	Bakhtiyorov Mironshah Ikhtiyor Ogli	4.9	70	190	5.2	80	26	31	14
5	Berdiyev Shokhrukh Abdinazarovich	5.0	69	180	5.1	60	31	21	13
6	Ghulamov Farrukh Ghafur Ogly	5.1	70	190	5.4	63	32	28	14
7	Halilillayev Amir Khan Alimardon Ogli	4.9	68	200	5.3	92	27	30	14
8	Son of Hasanov Sherzod Bayramali	4.9	69	180	5.3	60	26	23	13
9	Haydarova Rukhshona O'sar's daughter	4.7	70	185	5.6	63	30	20	15
10	Ibodullayev Umidjon Habibjonovich	4.8	70	180	5.4	97	38	19	15.5
11	Jabbarberganov, son of Muzaffar Rustam	4.9	69	180	5.1	53	29	25	13.5
12	Jalilov, son of Mirmuhammad Miraziz	4.9	68	180	5.0	85	26	31	15
13	Son of Jumanov Dilshad Ilkhom	4.8	67	185	5.3	112	29	26	13
14	Mamurov Abdurashid Mahkam Son	4.7	69	200	5.1	101	30	20	15.5
15	Muminov Saidbek Mirkarim Ogli	4.8	70	180	5.5	58	31	18	15
16	Mustafaqulov Jonibek Vafaqul Son	4.7	71	190	5.6	90	32	27	14.5
17	Mustafoyev Bahrom Obid son	5.1	68	195	5.3	101	30	25	14
18	Normamatov Behro'Z Burkhan Oglı	4.9	67	180	5.1	89	30	22	14.5

19	Achilov Jahangir Kabiljan Oghly	4.8	69	180	5.5	102	29	26	15.5
20	Son of Odilov Daniyor Jalaluddin	5.0	68	190	5.4	78	30	31	13
X (Average)		4.8	69.2	186	5.3	77	29.7	24.4	14.2

After that, in order to increase the efficiency of technical and tactical training in the study group during the annual training period, the ratio of technical-tactical exercises was increased in the planning of training hours, physical training exercises were added to match episodes, and in the experimental group, through this distribution, the training was trainings were conducted. After six months of training, we again received control norms from the volleyball players of the experimental group.

Tests for the assessment of physical and technical-tactical training of the control group before the study (Table 2)

No	FISH.	30 m. run to	400 m run	Standing long jump	Running with a ball for 30m	Playing the ball by hand	Ball away transmission	AUT	
1	Abbasov Muhammadrizo Ravshan O'gli	5.1	69	185	5.6	68	28	18	13
2	Son of Akbarov Adhamjon Valijon	4.9	71	190	5.4	70	27	22	14
3	Bahadirov, son of Murodjon Bahrom	4.8	67	180	5.2	59	25	24	13.5
4	Bakhtiyorov Mironshah Ikhtiyor O'gli	4.9	68	190	5.5	48	22	26	15
5	Berdiyev Shokhrukh Abdinazarovich	5.0	68	200	5.3	51	29	32	14
6	G'Ulomov Farrukh G'Afur O'gli	4.9	69	185	5.1	62	31	28	13.5
7	Halilillayev Amir Khan Alimardon O'gli	5.0	67	195	5.6	87	33	20	14
8	Son of Hasanov Sherzod Bayramali	4.9	70	190	5.3	99	31	26	15.5
9	Haydarova Rukhshona O'sar's daughter	5.0	70	180	5.5	133	29	21	14
10	Ibodullayev Umidjon Habibjonovich	5.1	69	180	5.5	48	27	25	13
11	Jabbarberganov, son of Muzaffar Rustam	4.9	68	195	5.4	59	32	24	14.5
12	Jalilov, son of Mirmuhammad Miraziz	4.9	68	190	5.3	75	31	22	14
13	Son of Jumanov Dilshad Ilkhom	4.8	67	185	5.2	81	29	24	15
14	Mamurov Abdurashid Mahkam Son	4.9	69	200	5.0	72	28	22	16
15	Muminov Saidbek Mirkarim O'gli	4.8	69	190	5.2	42	29	31	14
16	Mustafaqulov Jonibek Vafaqul Son	4.9	68	180	5.1	44	33	24	15
17	Mustafoyev Bahrom Obid son	4.8	70	185	5.3	87	31	28	15
18	Normamatov Behro'Z Burkhan O'gli	5.0	71	180	5.4	129	32	19	14.5

19	Achilov Jahangir Kabiljan Oghly	4.9	68	185	5.6	66	30	24	14
20	Son of Odilov Daniyor Jalaluddin	4.7	67	190	5.5	74	29	26	13.5
X (Average)		4.9	68.6	187	5.3	72.7	29.3	24.3	14.2

Experimental group C participants 30m before the study., while the control average was 4.8 seconds, after the study it was 4.6 seconds, and the 400 meter run was 69.2 seconds before the study. 66.8 seconds after study, standing long jump 186 centimeters before study, 197 centimeters after study, 30m. 5.3 in running with the ball, 5.0 seconds after the study, 77 before the study in footwork, 108 after the study, 29.7 meters in the long kick with the right foot and 29.7 meters with the left foot 24.4 meters in the kick, 32.9 meters in the right leg and 27.4 meters in the left leg after the study. Before the study, the result of throwing the ball from the outside was 14.2 meters, and after the study, this indicator was 16.1 meters (Table 3).

Tests for the assessment of physical and technical-tactical training of the experimental group after the study (Table 3)

No	FISH.	30 m. run to	400 m run	Standing long jump	Running with a ball for 30m	Playing the ball by hand	Pass the ball far		AUT
1	Abbasov Muhammadrizo Ravshan Ogli	4.8	66	200	5.0	89	35	24	16
2	Son of Akbarov Adhamjon Valijon	4.6	67	190	5.2	97	33	26	14.5
3	Bahadirov, son of Murodjon Bahrom	4.6	68	200	5.3	130	32	28	16.5
4	Bakhtiyorov Mironshah Ikhtiyor Ogli	4.7	68	200	5.0	180	30	35	16.5
5	Berdiyev Shokhrukh Abdinazarovich	4.8	66	190	5.0	160	36	27	15.5
6	G'Ulomov Farrukh G'AFur Ogli	4.7	66	210	5.2	76	38	33	16.5
7	Halilillayev Amirkhan Alimardon Ogli	4.8	67	215	5.0	130	31	33	18
8	Son of Hasanov Sherzod Bayramali	4.8	65	190	5.1	86	29	25	16.5
9	Haydarova Rukhshona O'sar's daughter	4.5	67	200	5.0	78	32	24	16.5

10	Ibodullayev Umidjon Habibjonovich	4.7	68	190	5.2	105	36	22	17
11	Jabbarberganov, son of Muzaffar Rustam	4.6	68	190	5.0	139	30	27	15
12	Jalilov, son of Mirmuhammad Miraziz	4.8	67	205	4.8	78	28	34	16
13	Son of Jumanov Dilshad Ilkhom	4.6	66	190	5.0	167	31	28	15.5
14	Mamurov Abdurashid Mahkam Son	4.5	66	185	4.9	91	33	21	17
15	Muminov Saidbek Mirkarim Oğli	4.6	67	200	5.2	90	34	19	16
16	Mustafaqulov Jonibek Vafaqul Son	4.6	68	200	5.3	73	36	29	16
17	Mustafoyev Bahrom Obid son	4.7	69	200	5.2	363	32	33	17
18	Normamatov Behro'Z Burkhan Oğli	4.8	65	205	5.1	97	36	28	17
19	Achilov Jahangir Kabiljan Oghly	4.6	66	190	4.9	107	34	24	15.5
20	Son of Odilov Daniyor Jalaluddin	4.6	67	205	4.8	126	32	28	16
X (Average)		4.6	66.8	197	5.0	108	32.9	27.4	16.1

Training in the control group was carried out unchanged and after 6 training sessions, we rechecked them through control standards. **The control group** exercised 30m before the study. They showed an average result of 4.9 seconds of running according to the control standard, but after the study, this indicator was 4.8 seconds. 68.6 seconds before the study in the 400 meters, 67.8 seconds after the study, 187 centimeters in the standing long jump, 191 centimeters after the study, 30m. in running with the ball was 5.3 seconds before the study and 5.2 seconds after the study. 72.7 in kicking the ball, 90.2 after the study, 29.3 meters in the right-footed long kick before the study and 24.3 meters in the left-footed kick, from the study then this indicator showed 30.8 meters in the right leg and 26.7 meters in the left leg. Before the study, the result of the throw was 14.2 meters, but after the study, this indicator reached 14.7 meters (Table 4).

According to the results of the study, the indicators of physical fitness increased in both groups compared to the initial results, but in the participants of the control group, these indicators increased at a low level, while in the research group, the results showed a significant increase. we can reach

Tests for the assessment of physical and technical-tactical training of the control group after the study (Table 4)

No	FISH.	30 m. run to	400 m run	Standing long jump	30m ball run with	Ball in hand to play	Pass the ball far		AUT
	Abbasov Muhammadrizo Ravshan Ogli	5.0	68	190	5.4	80	30	21	14
	Son of Akbarov Adhamjon Valijon	4.9	69	190	5.2	105	29	22	14
	Bahadirov, son of Murodjon Bahrom	4.7	67	185	5.1	145	29	27	14.5
	Bakhtiyorov Mironshah Ikhtiyor Ogli	4.9	67	190	5.4	135	26	30	15.5
	Berdiyev Shokhrukh Abdinazarovich	5.0	68	200	5.3	170	32	35	14
	G'Ulomov Farrukh G'afur Ogli	4.8	67	190	5.1	65	32	30	14
	Halilillayev Amirkhan Alimardon Ogli	4.9	66	200	5.4	89	33	25	15.5
	Son of Hasanov Sherzod Bayramali	4.9	69	195	5.2	138	31	28	15.5
	Haydarova Rukhshona O'sar's daughter	4.9	68	185	5.4	100	31	24	14
	Ibodullayev Umidjon Habibjonovich	5.0	68	185	5.3	70	28	26	14
	Jabbarberganov, son of Muzaffar Rustam	4.8	68	195	5.2	105	33	28	15
	Jalilov, son of Mirmuhammad Miraziz	4.8	67	200	5.1	89	32	24	14.5
	Son of Jumanov Dilshad Ilkhom	4.7	66	190	5.2	90	30	25	15
	Mamurov Abdurashid Mahkam Son	4.8	68	190	5.0	88	28	26	16.5
	Muminov Saidbek Mirkarim Ogli	4.7	69	195	5.1	50	31	32	15
	Mustafaqulov Jonibek Vafaqul Son	4.8	67	185	5.0	70	34	26	16

	Mustafojev Bahrom Obid son	4.8	68	190	5.1	40	33	29	15
	Normamatov Behro'Z Burkhan Oğlı	4.9	69	185	5.2	51	34	24	15
	Achilov Jahangir Kabiljan Oghly	4.8	68	195	5.2	45	31	24	14
	Son of Odilov Daniyor Jalaluddin	4.8	70	190	5.3	80	30	28	14.5
X (Average)		4.8	67.8	191	5.2	90.2	30.8	26.7	14.7

Summary: ScientificThe evidence shows that the control of volleyball players' competitive activity takes an important place in the process of training volleyball players. Along with the assessment of individual technical and tactical movements, volleyball players can determine the qualities of speed, strength, special agility, endurance and technical movement skills. Based on the results of the analysis, it is possible to have a targeted influence on various aspects of the volleyball player's training.

Technique training and its improvement depends on several factors, for example, the level of training of the players, the training period, the number of balls, the condition of the field and the meteorological conditions. Regular monitoring of movement training serves to consciously organize the work of the coach and is of great help to young volleyball players. Control and self-control instills a sense of freshness and self-confidence in a volleyball player.

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THEORETICAL FOUNDATIONS OF COSTS

Abstract. The article discusses international standards of provision, the corresponding classification of education in national practice and ensuring security in international practice.

Key words: International standards, assets, management, cost, type of activity, management decisions.

The organization of financial statements in economic entities on the basis of international standards of financial statements makes it possible to conveniently use foreign capital markets, increase confidence among foreign investors, ensure the intelligibility of reports. The application of International Financial Reporting Standards in the accounting system of countries is one of the factors of attracting high-potential investors in combination with reaching the world market. International Financial Reporting Standards are effective in assessing the financial stability of a subject, not only in their usefulness, but also in making management decisions.

The presentation of financial statements is formed on the basis of the requirements of international accounting standards (BHXS) and International Financial Reporting Standards (MHXS). It should be noted that the transition to Mhxs assumes the solution of organizational, legal, financial, technical, technological, as well as methodological and other issues of economic operations related to assets, liabilities, private equity, reserves, income, expenses, profit, losses and their movement, which are considered objects of accounting [1]. Each of the economic entities necessarily carries out expenses of different appearance in the conduct of their activities. It is important that the accounting of expenses is properly organized in economic entities in order to increase the efficiency of production and successfully continue their activities in one run. In them, the most important indicator of costs and cost in the adoption of decisions in management accounting is the recognition of expenses on the basis of MHXS, the improvement of their accounting is important for all economic entities.

Costs are the monetary expression of the costs associated with the production of products, the sale of goods, the performance of work and the provision of services. The following scientists Jumaniyozov K.K., Hasanov B.A., Pardayev A.X., Urazov K.B., Tashnazarov S.N., Hashimov A.A. in their scientific research, in their works, they stated.

The reform of accounting in our country was the adoption of PQ-4611 of the president of the Republic of Uzbekistan dated February 24, 2020 «On Additional Measures For The Transition To International Financial Reporting Standards». The decree of the Cabinet of Ministers of the Republic of Uzbekistan

No. 507 of August 24, 2020 «On Approval Of The Regulation On The Procedure For Recognizing The Text Of International Standards Of Financial Reporting And Explanations For It», the Order of the Minister of Finance of the Republic of Uzbekistan No. 61 of November 10, 2022 «On the recognition of the text of international standards of financial reporting and explanations for its application in the territory of the Republic of Uzbekistan[2,3,4].

The application of national standards affecting the accounting of expenses and expenses is based on the norms and rules for maintaining a mandatory account. National standards prevent the development of accounting thought, limit practice and do not allow the full use of professional reasoning in the reflection of certain events.

Under the international system of standards, there is no standard that sets the rules for recognizing and accounting for expenses. It can be seen from this that in economic entities, no special standards have been developed for the recognition of expenses and their accounting.

Accounting for expenses in Uzbekistan is regulated by a separate regulation. Resolution of the Cabinet of Ministers of the Republic of Uzbekistan dated February 5, 1999 «On Approval Of The Regulation On The Composition Of The Costs Of Production And Sale Of Products (Works, Services) And The Procedure For The Formation Of Financial Results». The organization of the accounting of expenses of road transport enterprises is carried out on the basis of the requirements of this regulation.

In international accounting practice, the basic requirements for the disclosure of information about expenses are established in the «principles of preparation and presentation of financial statements»(principles), which are not Standards in themselves. Nevertheless, it is this document that sets the basic requirements for the quality of financial statements and provides the basis for decision-making in cases that are not directly regulated by international standards.

Issues of accounting for certain types of expenses in business entities are solved by most standards that regulate the accounting of certain types of assets and liabilities, types and directions of activities, in particular, cost accounting and cost of finished products are considered in MHXS (IAS) 2-»Reserves». Accounting for costs associated with the execution of contracts is regulated by MHXS 11-»construction contracts». The basic standard that defines fixed assets, including depreciation-related cost accounting principles, is BHXS (IAS) 16 - «Fixed Assets». The performance of research work, as well as the accounting of costs associated with the depreciation of intangible assets, is regulated by BHXS (IAS) 38-»Intangible Assets». The main standard that determines the procedure for accounting for current employee income is MHXS (IFRS) 19-»Employee Income». The principles of accounting for expenses on debt are determined by MHXS (IAS) 23-»Expenses On Debts». The main standard that determines the procedure for accounting for leasing, rental payments is MHXS (IFRS) 16-»Rent», etc.

In accordance with the mhxs, the costs are recognized and recorded in the report during the period in which they occur, regardless of the cash payment, given that the company does not intend to stop or significantly reduce its activities. In addition, in accordance with the Mhxs, expenses must be recognized as expenses, even if there are no primary documents, such as invoices, during the reporting period to which they belong. In national standards, the last condition is not written.

International standards do not specify a mandatory classification of costs. Organizations independently choose the principle of cost distribution, setting their own choices in accounting policy.

Recently, the issue of developing a unified accounting system, including the concept of financial, management and tax accounting, has been more and more discussed in regulatory documents and specialized literature. This is primarily due to the reform of the national accounting and reporting system in accordance with the IFRS.

Recommendations for the recognition and accounting of expenses on the basis of International Financial Reporting Standards:

- formation of accounting policies based on the requirements and principles of international accounting standards;
- selection of methods in the formation of accounting policies, accounting for expenses, analyzing the requirements of current legislation;
- development of a plan of expenses accounting accounts and an instruction for its use;
- to rely on professional reasoning in recognizing expenses based on international accounting standards.

Costs are one of the categories that influence the choice of the optimal strategy for the development of the enterprise and ensure the formation of the target result today and in the future. In this regard, the cost accounting system should provide both internal and external users with information on both backward and future costs.

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Elboyeva U.R.
Ajiniyaz nomidagi Nukus davlat pedagogika instituti jismoniy madaniyat
fakultetining 3 - D guruh talabasi

SOG‘LOM TURMUSH TARZINI TASHKIL ETISHDA JISMONIY TARBIYA ASOSLARI

Annotatsiya. Ushbu maqolada sog‘lom turmush tarzi asoslari, uning mazmuni, sog‘lom turmush tarzini shakllantirish, sog‘lom turmush tarzi jismoniy madaniyati, uning tarkibiy qismlari, jismoniy madaniyat, sport, sayohat va xalq o‘yinlariga bag‘ishlangan. Jismoniy madaniyatning asosini tashkil yetuvchi faol harakatlar, jismoniy tarbiya va sport, jismoniy tarbiya, jismoniy rivojlanish, kun tartibi, shaxsiy gigeniya, atrof-muhit, chiniqtirish omillari, jismoniy kamolot, sog‘lom turmush tarzi xususiyatlari haqida ma‘lumotlar keltirilgan.

Kalit so‘zlar: jismoniy tarbiya va sport, ommaviy sport, organizm, funksional, imkoniyat, sog‘lom va barkamol avlod, faol harakat, jismoniy bilim, jismoniy sifatlar, jismoniy qobiliyat.

Elboyeva U.R.
student of the 3rd group D
Faculty of Physical Culture
Nukus State Pedagogical Institute named after Ajiniyaz

PRINCIPLES OF PHYSICAL EDUCATION IN ORGANIZING A HEALTHY LIFESTYLE

Abstract. This article deals with the basics of a healthy lifestyle, its meaning, the formation of a healthy lifestyle, physical culture of a healthy lifestyle, its components, physical culture, sports, travel and folk games. Information about active activities, physical education and sports, physical education, physical development, daily routine, personal hygiene, environment, training factors, physical maturity, and healthy lifestyle features, which are the basis of physical culture.

Key words: physical education and sport, mass sport, organism, functional, opportunity, healthy and well-rounded generation, active movement, physical knowledge, physical qualities, physical ability.

Kirish

Yurtboshimiz Shavkat Mirziyoyev aytganlaridek, sog‘lom xalq, sog‘lom millatgina buyuk ishlarga qodir bo‘ladi. Shu boisdan Prezidentimiz rahnamolgida yosh avlodning har tomonlama barkamol bo‘lib yetishish uchun barcha sharoitlar yaratilmoqda. Shu bilan bir qatorda mamlakatimizda sog‘lom va barkamol avlodni tarbiyalash, yoshlarning ijodiy-intellektual salohiyatini ro‘yobga

chiqarishi, mamlakatimiz yigit-qizlarini XXI asr talabalarga to'liq javob beradigan, har tomonlama rivojlangan shaxslar etib voyaga yetkazish uchun zarur shart-sharoitlar, imkoniyatlarni yaratish bo'yicha keng ko'lamli aniq yo'naltirilgan chora-tadbirlarni amalga oshirish maqsadida O'zbekiston Respublikasida qonun va qonun osti xujjatlar, jumladan, «Jismoniy tarbiya va sport to'g'risida» Qonunning qabul qilinishi (1992,2000,2015y), 2017-yil 3-iyunda «Jismoniy tarbiya va ommaviy sportni yanada rivojlantirish chora-tadbirlari to'g'risida»gi qaror; 2018-yil 5-martda «Jismoniy tarbiya va sport sohasida davlat tizimini tubdan takomillashtirish chora-tadbirlari to'g'risida» gi farmoni; 2019-yil 29-yanvarda «O'zbekistonda sog'lom turmush tarzini targ'ib qilish va aholini jismoniy ommaviy sportga jalb etish to'g'risida», 2019-yil 13-fevralda «2019-2023-yillar davomida O'zbekistonda Jismoniy va ommaviy sportni rivojlantirish konsepsiyasini tasdiqlash to'g'risida», «Sog'lom turmush tarzini keng tatbiq etish va ommaviy sportni yanada rivojlantirish chora-tadbirlari to'g'risida», 2020-yil30-oktabrda O'zbekiston Respublikasi Prezidentining farmoni va qarorlar qabul qilindi. Ushbu qaror, farmonlarni qabul qilinishi O'zbekistonda Jismoniy tarbiya va sportning qay darajada taraqqiy etayotganidan, shu bilan bir qatorda Jismoniy tarbiya va ommaviy sport bilan muntazam shug'ullanish hamda sog'lom turmush tarzi bo'yicha hayotiy ko'nikmalarni shakllantirish orqali har bir fuqaroda kasallikka qarshi kuchli immun tizimi paydo bo'lishini ta'minlash, zararli odatlardan voz kechish, to'g'ri ovqatlanish tamoyillariga amal qilish, tiklash va rehabilitatsiya ishlari hamda ommaviy jismoniy faollik tadbirlarini tizimli va samarali tashkil qilish, bu borada tegishli infratuzilma va boshqa zarur shart-sharoitlarni yaratish maqsadida qabul qilingan, desak, mubolag'a bulmaydi. Qabul qilingan me'yoriy hujjatlar ta'lim muassasalarida ilg'or xorijiy tajribani hisobga olgan holda bolalarni har tomonlama intellektual, axloqiy, estetik va jismoniy rivojlantirish sharoitlarini yaratish; ta'lim sifatini oshirish, ta'lim muassasalarida ta'lim-tarbiya jarayoniga jahon amaliyotida keng qo'llaniladigan zamonaviy ta'lim dasturlariva texnologiyalarini joriy etish imkoniyatini yaratadi.

Tahlil va natijalar

Ta'lim bosqichlarining uzluksizligi va izchilligini ta'minlash, ta'limning zamonaviy metodologiyasini yaratish, davlat ta'lim standartlarini kompetensiyaviy yondashuv asosida takomillashtirish, o'quv- metodik majmualarning yangi avlodini ishlab chiqish va amaliyotga joriy etish, ta'lim muassasalarining sifatini yaxshilash hamda ularni rivojlantirish chora-tadbirlarini amalga oshirish hamda pedagog xodimlarini kasbiy qayta tayyorlash tizimini yanada takomillashtirish taqozo etadi. Ta'lim-tarbiya tizimi jarayoniga yangicha yondashish, bola tarbiyasidagi o'zbek xalqining milliy an'analari, qadriyatlar, xalq ijodiyotining o'ziga xosligi, xalq pedagogikasining ulkan tajribasi hamda o'ziga xos xususiyatlari, mintaqa iqlim sharoitlari, bolaning jinsi, yosh bokschilari, ularning anatomik-fiziologik, psixologik-gigiyenik jihatlari, barcha ijobiy xususiyatlarini o'zlashtirishni uyg'unlashtirish masalalari alohida o'rin

egallaydi.

Sogʻlom turmush tarzi insonning madaniy, jismoniy rivojlanishi, mehnat unumdorligi va ijodiy faoliyatini oshirishni oʻz ichiga oladi. Sogʻlom turmush tarzining asosiy tarkibiy qismlari samarali ish faoliyati, shaxs gigiyena, gigiyena talablariga qatʼiy rioya qilish, zararli odatlardan voz kechish, belgilangan bir vaqtda toʻgʻri ovqatlanish, jismonan va ruhan chiniqish, jismoniy tarbiya bilan muntazam shugʻullanib turish. Sogʻlom turmush tarzi kasalliklarning oldini olishda asosiy tadbirlardandir. Sogʻlom turmush tarzi maʼlum miqdorda ruhiy va jismoniy talablarni qoniqarli darajada amalga oshirishga imkon beradi. Kun sayin sogʻlomlashtirish uslubining turlari oshib bormoqda. Jismoniy mashqlar, ovqatlanish meʼyori, uyqu, hammomdan foydalanish va boshqalar harakat faoliyatini oshirib boradi.

Jismoniy tarbiya va sportda sogʻlomlashtirish texnologiyalarining dolzarbligi va ahamiyati borasida sogʻlomlashtirish texnologiyalari birinchi navbatda jismoniy madaniyat orqali inson salomatligini saqlash va mustahkamlashni taʼminlashga qaratilgan. Sogʻlomlashtirish samaradorligi har qanday jismoniy mashqlar shakllarining majburiy komponentidir. Shu munosabat bilan jismoniy madaniyatning barcha tarkibiy qismlari (sport, asosiy, kasbiy-amaliy, sogʻlomlashtirish va jismoniy madaniyat) sogʻlomlashtirish funksiyalarini bajaradi.

Ayni paytda, zamonaviy jamiyatda jismoniy tarbiya, shu jumladan yangi va rivojlanayotgan asbob-uskunalar va texnik vositalar yordamida sogʻliqni saqlashni mustahkamlash zaruriyati tobora ortmoqda. Bu, birinchi navbatda, salomatlik muammolarini samarali hal etish uchun moʻljallangan maxsus tashkil etilgan faoliyatni talab qiladi. Jismoniy tarbiya va sportda sogʻlomlashtirish texnologiyalarning asosiy maqsadlaridan biri har bir inson organizmidagi oʻz ichki imkoniyatlarini mustahkamlashga intilishi kerakligiga daʼvat etish va har bir shaxs oʻzi va boshqalar uchun «sogʻlom turmush» tarzini yaratishligi hamda sogʻlom avlod orzusida yashashlik va unga erishishga imkoniyat yaratish, salomatlikni saqlash, mustahkamlash va uzoq umr koʻrishga daʼvat etishdan iborat.

Xulosa

Jamiyatimizda sogʻlom turmush tarzini shakllantirish, aholining, ayniqsa, yosh avlodning jismoniy tarbiya va ommaviy sport bilan muntazam shugʻullanishi uchun zamon talablariga mos shart-sharoitlar yaratish, sport musobaqalari orqali yoshlarda oʻz irodasi, kuchi va imkoniyatlariga boʻlgan ishonchni mustahkamlash, mardlik va vatanparvarlik, ona Vatanga sadoqat tuygʻularini kamol toptirish, shuningdek, yoshlar orasidan iqtidorli sportchilarni saralab olish ishlarini tizimli tashkillashtirish hamda jismoniy tarbiya va ommaviy sportni yanada rivojlantirishga yoʻnaltirilgan keng koʻlamli ishlar amalga oshirilmoqda.

Yoshlarni boʻsh vaqtlarini mazmunli tashkil etish ularni salomatligini asrab avaylash, mustahkamlash maqsadida ommaviy sport turlariga jalb etish va aholi

salomatligini mustahkamlash borasida ijtimoiy muhitga ommaviy sportni jalb etish borasida bir qancha ishlar amalga oshirilmoqda. Sogʻlom turmush tarzi va tibbiy madaniyat va sport uygʻunligi borasida yosh avlodga tushnalar berib, ongiga singdirish bugungi kunning dolzarb fazifalaridandir.

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*Ergashev A.K.
Buxoro davlat pedagogika instituti,
Tabiiy fanlar kafedrası assistenti*

COMPOSITION AND DYNAMICS OF THE POPULATION OF THE KAGAN DISTRICT

Annotatsiya. Ushbu maqolada tadqiqot obyekti sifatida Buxoro viloyatining tumanlaridan biri Kogon tuman aholisi olingan. Maqolada tuman aholi soni, aholi zichligi va ularning hudud bo'yicha tarqalishi, aholining milliy tarkibi, yosh hamda jinsiy tarkiblari aniqlangan. Aholi tarkibini Buxoro viloyatining boshqa tumanlari bilan ham taqqoslangan.

Kalit so'zlar: Kogon tuman, aholi, aholi zichligi, yosh tarkib, jinsiy tarkib, milliy tarkib.

*Ergashev A.K.
assistant
Department of Natural Sciences
Bukhara State Pedagogical Institute*

COMPOSITION AND DYNAMICS OF THE POPULATION OF THE KAGAN DISTRICT

Annotation. This article takes the population of Kogon district, one of the districts of Bukhara region, as the object of the study. The article identifies the district's population, population density and their distribution by Region, national population composition, age and sex composition. The composition of the population was also compared with other districts of Bukhara region.

Keywords: Kogon district, population, population density, young content, sexual content, National Content.

Kogon Buxoro viloyatining tumanlaridan biri bo'lib, maydoni 0,5 ming km². Tuman viloyat maydonining (40 220 km²) 1,2 % ni tashkil qiladi. Maydonining kattaligiga ko'ra viloyatning 11 ta tumani ichida 10-o'rinda (faqat Vobkent tumanidan katta) turadi.

1926-yil 29-sentabrda O'zbekiston SSR hududi qaytadan ma'muriy birliklarga bo'linadi hamda 7 ta viloyat va 23 ta uyezd o'rnida 10 ta okrug tashkil qilinadi. Buxoro okrugida Bahouddin (tuman markazi – Yangi Buxoro (Kogon)) tumani tashkil qilinadi. O'shanda Bahouddin tumani tarkibiga Kogon, Tutikunda, O'bacho'li, Ko'lishag'alon, Frunze qishloq kengashlari va Qorovulbozor posyolkasi kiritiladi. Keyinchalik sovet hokimiyati va kommunistik mafkura tomonidan Bahouddin tumanining nomi Yangi Buxoro, 1935-yildan Kogon

tumani deb o'zgartiriladi. 1963-yilda tuman tugatilib, 1964-yilda u qayta tashkil etiladi[2].

Kogon tuman aholisining tarkib topishi uzoq tarixiy davrni o'z ichiga oladi. Tumanda jami 84,6 ming kishi (2024-yil 1- yanvar holati bo'yicha) istiqomat qiladi. Aholi soni bo'yicha Buxoro viloyati tumanlari ichida 10-o'rinda turadi (1-jadval). Tuman aholisi o'rtacha har yili 7,6% o'sib bormoqda.

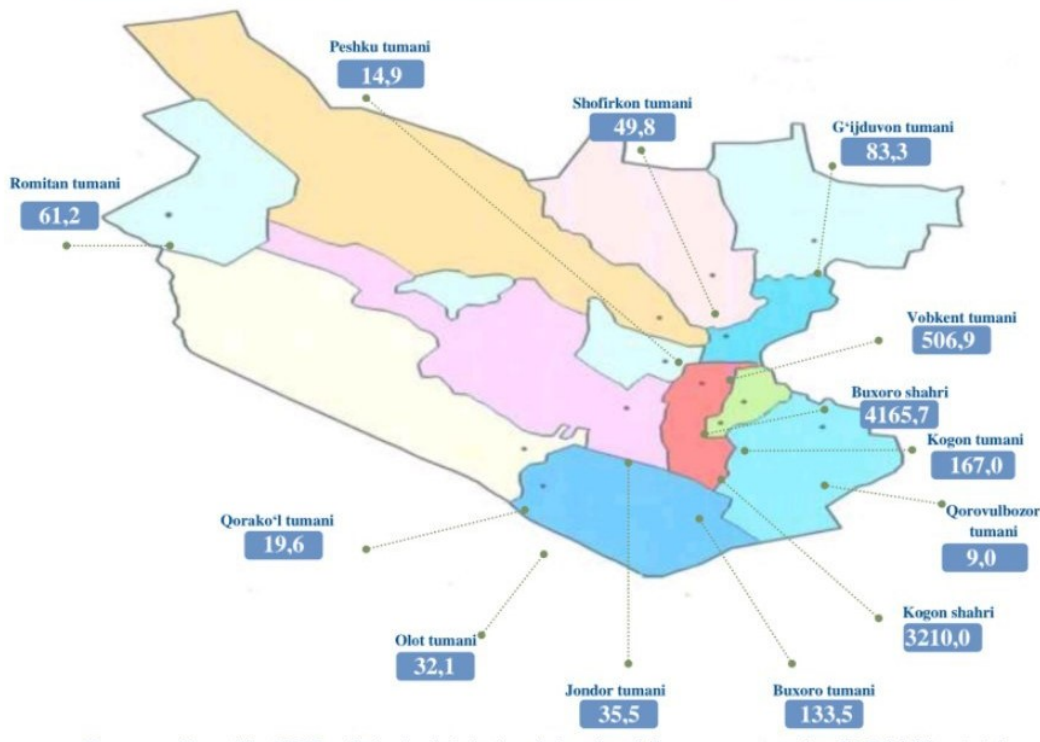
1-jadval

Buxoro viloyati tumanlarida aholi soni (ming kishi hisobida)

T/r	Tumanlar	Yillar			
		2013	2017	2021	2024
1	G'ijduvon tumani	275,0	295,0	307,2	322,5
2	Shofirkon tumani	158,0	169,2	179,0	186,5
3	Jondor tumani	152,2	164,8	176,5	185,5
4	Qorako'l tumani	145,3	155,7	165,1	171,8
5	Buxoro tumani	143,8	156,4	168,9	178,4
6	Romitan tumani	124,8	133,8	143,8	151,4
7	Kogon tumani	67,7	72,5	79,4	84,6
8	Peshku tumani	107,5	115,9	124,6	131,2
9	Vobkent tumani	123,5	132,6	141,3	148,7
10	Olot tumani	87,8	94,4	100,1	104,3
11	Qorovulbozor tum	15,9	17,4	18,5	19,9

Jadval Buxoro viloyat statistika bosh boshqarmasi ma'lumotlari asosida tuzildi

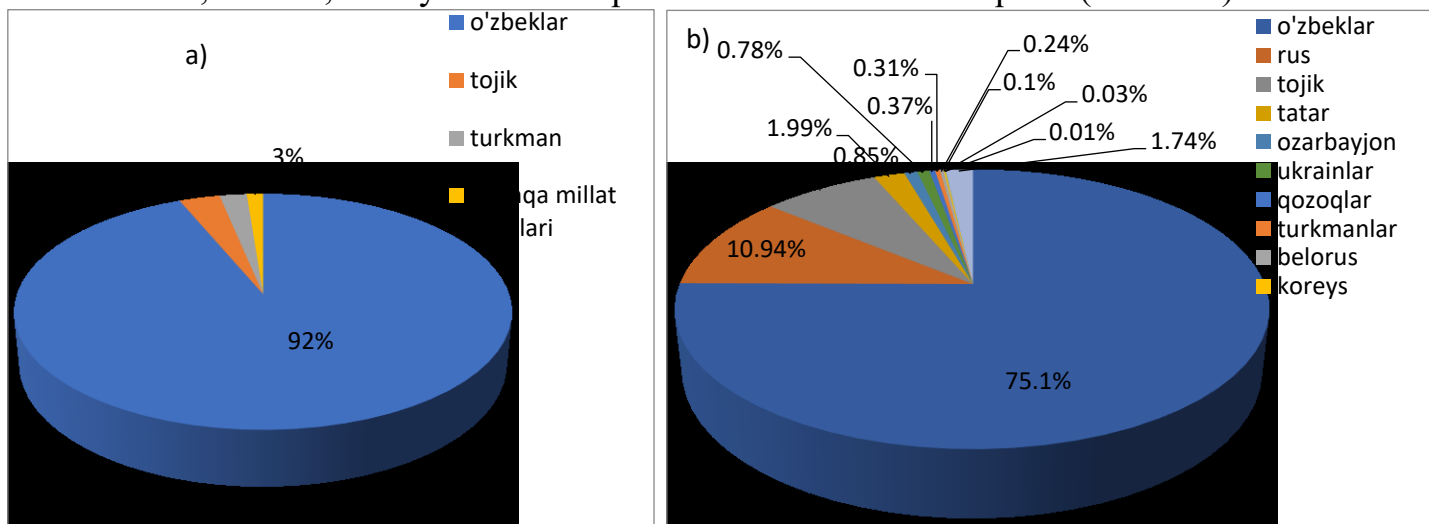
Tumanning aholisi hudud bo'ylab notekis taqsimlangan. Aholi asosan markaziy hududlarda zich o'rnashgan. Tumanning janubiy tomonlarida esa ancha siyrak o'rnashgan. Aholining o'rtachazichligi 1 km²ga 169,2 kishiga to'g'ri keladi. Bu ko'rsatkich viloyat o'rtacha ko'rsatkichidan (50,8 kishi) uch marta yuqori. Kogon tuman aholisining zichligini viloyatning boshqa tumanlari bilan solishtirsak, quyidagi holatning guvohi bo'lamiz(2023-yil 1-iyul). Aholi zichligining eng yuqori ko'rsatkichi Buxoro shahrida **4 165,7** kishi, Kogon shahrida **3 210,0** kishi, Vobkent tumanida **506,9** kishi, Kogon tumanida **167,0** kishini, Buxoro tumanida **133,5** kishi tashkil etgan bo'lsa, eng past ko'rsatkichlar Qorovulbozor tumanida **9,0** kishi, Peshku tumanida **14,9** kishi, Qorako'l tumanida **19,6** kishi, Olot tumanida **32,1** kishi, Jondor tumanida **35,5** kishi, Shofirkon tumanida **49,8** kishini tashkil etgan. Aholi zichligi bo'yicha Kogon tumani viloyat tumanlari orasida Vobkent tumanidan so'ng 2 – o'rinda turadi.



1-rasm. Buxoro viloyati bo'yicha aholi zichligi.

2023-yil 1-iyul holatiga. 1 kv.km.ga to'g'ri keladigan aholi soni, kishi

Tuman aholisining milliy tarkibiga nazar soladigan bo'lsak, jami aholining 92 %ni o'zbeklar, 3 % ni tojiklar, 2 % turkmanlar va qolgan 3% ni qozoqlar, ruslar, tatarlar, eroniylar va boshqa millat vakillari tashkil qiladi (2-a rasm).



2-rasm. Kogon tumani (a) va shahrining (b) milliy tarkibi

Kogon tuman va shahar statistik ma'lumotlari asosida tuzildi

Tuman markazida Kogon shahri anklav shaklda joylashgani uchun shaharning ham milliy tarkibiga to'xtalamiz[3]. Kogon shahri misolida aholining milliy tarkibini ko'radiganbo'lsak, shaharda 75.1 % aholi o'zbek millati, 10,94 % aholi rus millati, 7,54 % ni tojik millati tashkil etadi. Kogon shahri va tumani

aholisining milliy tarkibini taqqoslaganda tuman hududida o'zbek millati ko'proq kishini tashkil etadi. Shahar hududida esa nisbatan kamchilikni tashkil etadi (75,1 %), rus va tojik millatlari umumiy aholining 20 % ga yaqinini tashkil etadi (2-b rasm). Tumanda boshqa millat vakillarining ko'pligining asosiy sabablari Buxoro viloyatining transport tuguni aynan shu yerda joylashgan. Temiryo'l sohasidagi mutaxassislarning aksariyati dastlab xorijdan olib kelingan. Shaharda temiryo'l bilan birga ko'plab boshqa turdagi sanoat korxonalarini ham tashkil etiladi, o'z-o'zidan ushbu korxonalarining asosiy ish yurutuvchi muhandislari ham chet eldan olib kelinadi. Hozirgi kunda Kogon shahrida «Ozarbayjon madaniyat uyi», «Bratskiy Magila» rus cherkovi kabilarning mavjudligi o'zbek va boshqa millat vakillarining og'a-ini bo'lib yashayotganlaridan dalolat beradi (2-jadval).

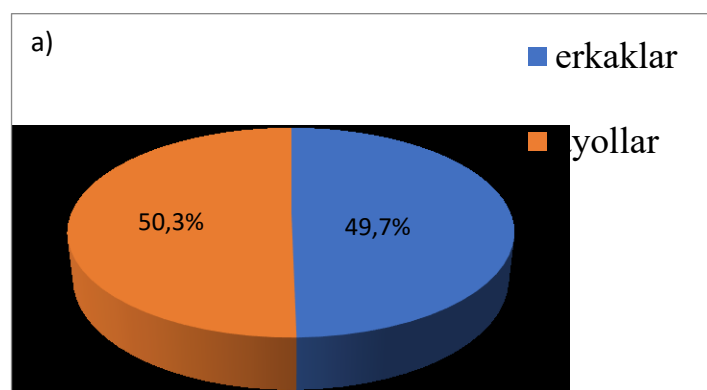
2-jadval

Kogonshahri aholisining milliy tarkibi:

T/R	Millatlar	2018 yil 1 yanvar xolatida(kishi)	Foiz xisobida
1.	O'zbeklar	45143	75.1
2	Qoraqalpoq	20	0.03
3	Ruslar	6583	10.94
4	Ukrainlar	472	0.78
5	Kozoklar	225	0.37
6.	Tojiklar	4542	7.54
7	Tatarlar	1201	1.99
8	Ozarboyjonlar	513	0.85
9	Koreys	66	0.1
10	Beloruslar	145	0.24
11	Turkmanlar	190	0.31
12	Qirg'iz	12	0.01
13	Boshkalar:	1052	1.74
	J A M I:	60164	100.0

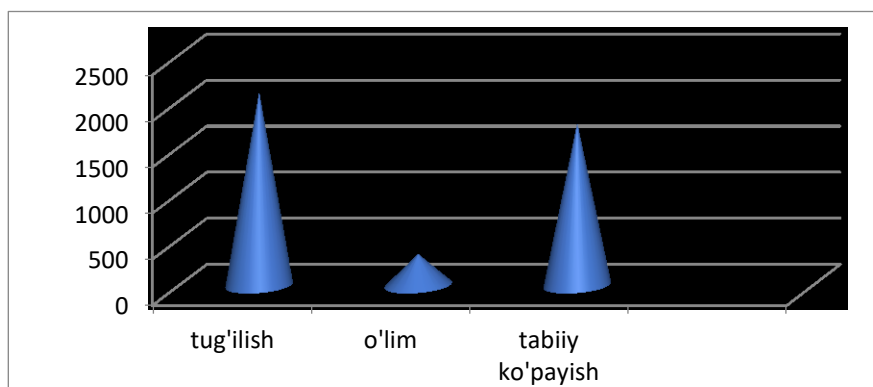
Ma'lumotlar oldingi yillarda o'tkazilgan aholiro'yxatiyakunlariga nisbatan olingan

Aholi tarkibi jins va yosh jihatidan yondashish katta ahamiyatga ega. Chunki aholini va inson omilini takrorishlab chiqarish xuddi anashu jihatlarga bog'liq. Kogon tumani aholisining jinsiy tarkibida jinslar orasida katta tafovut yo'q. Jami aholining 49,7 % (42 300 kishi) erkaklar, 50,3 % (42 700 kishi) ayollar tashkil etadi (2024-yil 1-aprel). Bu ma'lumotdan ko'rinib turibdiki Kogon tumanida ayollar erkaklarga nisbatan ko'pchilikni tashkil etadi (3-rasm).



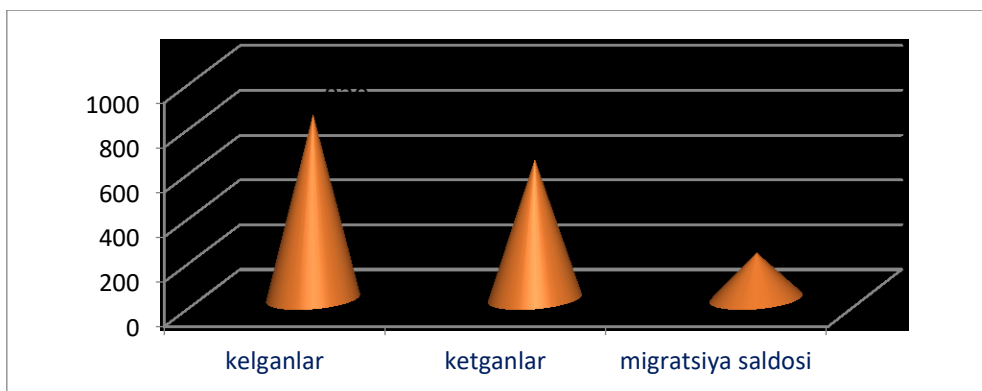
3-rasm. Kogon tuman aholisining jinsiy tarkibi

Tumanda aholi tabiiy ko'payish hisobiga ko'paymoqda. Tumanda 2023-yil ma'lumoti bo'yicha, 2083 ming tug'ilish, 333 o'lim qayd qilingan bo'lib, tabiiy ko'payish esa yiliga 1750 kishiga to'g'ri keladi (4-rasm). Bunday tabiiy ko'payish ancha yuqori hisoblanadi. Masalan, tuman aholisi 2021-yilda 79,4 ming kishini tashkil etgan bo'lsa, 2024-yilga kelib 84,6 ming kishiga yetdi.



4-rasm. Kogontumani aholisining tug'ilish va o'lim ko'rsatkichi

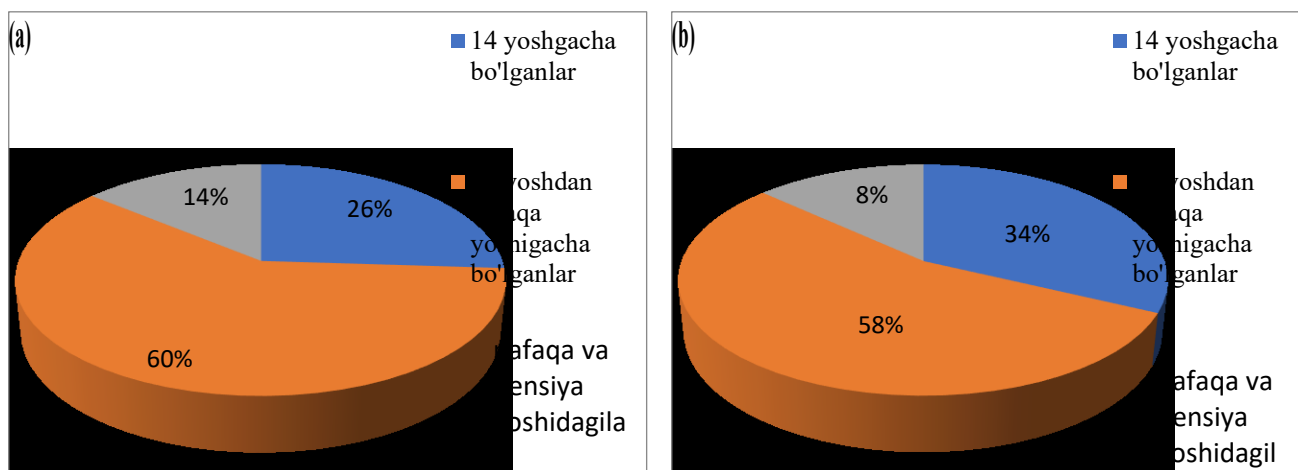
Tumanning migratsion holati musbat ko'rsatkichga ega. Tumanga bir yil davomida kelganlar soni 820 kishi, ketganlar soni esa 618 kishini tashkil etadi. Migratsiya saldosi ko'rsatkichi 202 kishiga teng (5-rasm). Tuman aholishining bir yil davomidagi umumiy ko'payishini ko'radigan bo'lsak quyidagicha ko'rsatkich keladi. $1750 + 202 = 1952$. Demak 2023-yilda tuman aholisi deyarli ikki ming kishiga ko'paygan.



5-rasm. Kogon tumanining migratsiya darajasi

Tuman aholisining yosh tarkibini ko'radigan bo'lsak, aholisining (73 300 kishi) 19 454 nafari 14 yoshgacha bo'lgan yoshlar tashkil qiladi. Bu jami aholining 26% ni tashkil qiladi. Tumandamehnat resurslari esa 44 000 nafarni tashkil etadi (60%). Qolgan aholi esa nafaqa va pensiya yoshidagi aholi hisoblanadi (6-a rasm).

Kogon shahrida esa 14 yoshgacha bo'lgan yoshlar shahar jami aholisining 19 840 nafarini tashkil etadi. Bu jami aholining (60 164 kishi) 34 % ga teng. Shahar aholisining mehnat resursi esa 35 121 kishini tashkil etadi bu jami aholining 58 % ga demakdir (6-b rasm). Kogon tumaniva shahrida mehnat resurslari jami aholining yarmidan ortiqrog'ini tashkil etadi. Bundan ko'rinib turibdiki kelgusida xo'jalik sohaslarini joylashtirishda ko'p mehnat talab korxonalarini qursa bo'ladi.



6-rasm. Kogon tumani (a) va shahri (b) aholisining yosh tarkibi

Kogon tumani jami aholisining 60 %i (43980 kishi) mehnatga layoqatli aholi tashkil qiladi. Xalq xo'jaligi tarmoqlarida bandlik har xil bo'lib, bu talab va ehtiyojdan kelib chiqadi. Tumanning iqtisodiyot tarmoqlarida band bo'lganlar soni 34,4 ming kishi bo'lib, jami aholining 47 % ga teng.

Iqtisodiyotda band aholining teng yarmisanoat va qishloq xo'jaligida band. Bunda tumanga xos jihatlardan biri sanoatda band aholining qishloq xo'jaligida

band aholidan ustunligidir. Bu tumanda sanoat korxonalarining nisbatan ko'pligi va yirikligi bilan izohlanadi. Bundan tashqari Kogon shahrining transport tuguni ekanligi tuman aholisi tarkibida transportda band aholining umumiy bandlikning yuqori pog'onalarida bo'lishitaminlagan.

Olingan statistik ma'lumotlarga ko'ra uy-joy kommunal xo'jaligi va maishiy xizmatda band aholi ko'rsatilmagan. Tuman aholisining iqtisodiyotda bandligi ming kishi hisobida va foizda3-jadvalda keltirilgan.

3-jadval

Kogon tumanining iqtisodiyotda band aholisi

Iqtisodiyot tarmoqlari	Ming kishi	% da
Sanoatda	9,3	27
Qishloq xo'jaligida	7,9	23
Savdo, umumiy ovqatlanish moddiy ta'minot, tayyorlov korxonalarida	5,9	17,1
Boshqa soha va tarmoqlarda	3,78	11
Qurilishda	2,9	8,4
Xalq ta'limida	2,5	7,2
Sog'liqni saqlash, jismoniy tarbiya va ijtimoiy ta'minot	1,0	3
Transportda	0,7	2
Boshqaruv organlarida	0,3	0,8
Aloqada	0,07	0,2
Madaniyat va sa'nat	0,04	0,1
Sug'urta, moliya, va nafaqa jami	0,01	0,02
Uy-joy kommunal xo'jaligi, maishiy xizmat	0	0
Jami	34,4	100

Jadval Kogon tuman statistika bo'limi ma'lumotlari asosida tuzildi

Jadvaldan ko'rinib turibdiki iqtisodiyotda band aholining asosiy qismi sanoat, qishloq xo'jaligi, savdo, umumiy ovqatlanish, moddiy ta'minot, tayyorlov korxonalarida band. Madaniyat va san'athamda sug'urta-moliya tizimida bu ko'rsatkichlar ancha past.

Kogon tumani mehnat resurslarining taqsimlanishi bo'yicha viloyatda yetakchilardan hisoblanadi. Bu borada ko'rsatkich ming kishiga 150 kishidan ortiq. Iqtisodiy faol aholi 67,8 ming kishini, iqtisodiy nafaol aholi 16,9 ming kishini tashkil etadi. Viloyat bo'yicha mehnat resurslarining taqsimlanishida tumanning salmog'i 8,3 % ni tashkil etadi. Bu borada viloyatda 6-o'rinda turadi[5].

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*Ergasheva N.A.
katta o'qituvchi
Navoiy davlat konchilik va texnologiyalar universiteti*

TOPONIMLAR – KO‘HNA TARIX GUVOHLARI

Annotatsiya. O‘zbek tilshunosligida xalq tarixi, qadriyati, an‘ana va urf-odatlarini o‘zida to‘liq ifodalovchi lisoniy birliklar – toponimlarni muayyan hudud misolida lingvistik tadqiq etish dolzarb vazifalardan biri hisoblanadi. Bu jihatdan qadimdan shakllangan va hozirda ijtimoiy-iqtisodiy, madaniy rivojlanish yo‘lini bosib o‘tayogan Paxtachi tumani toponimlarining leksik-semantik, onomastik, grammatik xususiyatlarini, kelib chiqish asoslarini lingvogeografik, etnolingvistik hamda kelib chiqish xususiyatlarini o‘rganish dolzarblik kasb etadi.

Kalit so‘zlar: onomastika, grammatik xususiyatlar, lingvistik tahlil, madaniy rivojlanish, urug‘ va qabila.

*Ergasheva N.A.
head teacher
Navoi State University of Mining and Technology*

TOPONAMES - WITNESSES OF ANCIENT HISTORY

Annotation. In Uzbek linguistics, one of the urgent tasks is the linguistic study of linguistic units - toponyms that fully express the history, values, traditions and customs of the people. In this regard, the study of the lexico-semantic, onomastic, grammatical features of toponyms of the Pakhtachinsky district, linguogeographic, ethnolinguistic and exhaustive features of toponyms that have long been formed and are now following the path of socio-economic and cultural development becomes relevant.

Key words: onomastics, grammar, linguistic analysis, cultural development, gender and tribe.

Asosiy matn. O‘zbek onomastikasi yoki nomshunosligi o‘tgan asrning 60-70-yillarida alohida ilmiy yo‘nalish sifatida yuzaga keldi. O‘zbek nomshunosligi o‘tgan asrning ikkinchi yarmidan boshlab eng rivojlangan sohalaridan biriga aylandi. Ayniqsa, bu sohaning antroponimika, toponimika, etnonimika kabi bir qator sohalarida juda barakali ishlar amalga oshirildi. Tildagi atoqli nom (ot)larning xilma-xil xususiyatlari juda qadimgi davrlardan buyon turli soha olimlarining diqqatini o‘ziga jalb etib kelmoqda. Masalan, qadimgi yunon olimlari Aristotel, Demokrit, Geraklitning asarlarida ham atoqpi otlarning xususiyatlari haqida fikr-mulohazalar bildirilgan edi

Toponimlarni lisoniy jihatdan tahlil qilish, ayniqsa, semantik xususiyatlarini o'rganish xalqning milliy, etnik, ijtimoiy-siyosiy, madaniy tarixini, tilning tarixiy taraqqiyoti va takomilini yoritishda, tilning nominativ, kommunikativ, akkumulyativ funksiyalari mohiyatini aks ettirishdagi o'rni beqiyos. Talab va ehtiyojlar natijasida o'zbek tilshunosligida xalq tarixi, qadriyati, an'ana va urf-odatlarini o'zida to'liq ifodalovchi lisoniy birliklar – toponimlarni muayyan hudud misolida lingvistik tadqiq etish dolzarb vazifalardan biri hisoblanadi. Toponimlar, asosan, boshqa til birliklari kabi muayyan qoliplar asosida hosil bo'ladi. Ko'plab toponimlar tarkibida an'anaviy indikatorlar uchraydi. Indikator (toponimikada) – toponimlarni hosil qiluvchi маҳаллий географик терминлардир: обод, кум, тепа, кўрғон, дарё, сув, кент ва бошқалар.

Ma'lumki, bizni o'rab olgan borliq, moddiy olam nixryatda murakkab, boy, serqirra, rang-barang bo'lib, uni tashkil qilgan narsa va hodisalar mohiyati, holati, shakli, ko'rinishi va vazifasiga ko'ra bir-biridan farqlanadi. «Turdosh ot» termini bilan yuritituvchi so'zlar mana shu xususiyatlardan bir qisminigina, ot kategoriyasigi kiruvchilarnigina ifodalashga xizmat qiladi. Kishilar o'zlari yashab turgan hududdagi daryolar, ko'llar, buloqlarni va ularni tashkil etuvchi har bir daryo, har bir ko'l, har bir buloqni bir-biridan farqlash uchun ularni alohida-alohida nomlar bilan atagan. Masalan: Amudaryo, Sirdaryo, Zarafshon, Nil, Oyko'l, Baykal ko'li, Toshbulots, Ko'pshbulots, Marjonbuloq, Zirabulots kabilar. Bunday ko'rinadiki, atokli otlar narsa va hodisalarni, obyektlarni yakka, donapab atash zaruriyatigina keladi.

Toponimlarda xalqniig o'tmishi. urf-odatlarini, boshidan kechirgan turli xil siyosiy-ijtimoiy. etnomadaniy jarayonlar o'z aksini gopgan bo'ladi. Shunga binoan toponimiya muayya til yaugat boyligishshsh muxdm tarkibiy qismi, o'tmish voqealari darakchisi sanaladi. 'xl Uzbek toponimikasini ilmiy jihatdan o'rganish XX asrning 60-yillarida boshlangan. O'tgan davr mobaynida o'zbek toponimikasini o'rganish bo'yicha juda salmokli nshlar amalga oshirildi. Bu ishlar orasida tanikli geograf olim X Hasanovnish «O'rta Osiyo joy nomlari tarixidai» nomli monografiyasi alohida o'rin tutadi. Bu asarda geografik nomlar - toponimlarnij tarixi, ularnish xmlma-xilligi va shakllanish qonuniyatlari qisqacha bayon etilgan hamda toponimika fani to'grisida qiskacha tushuncha berilgan. Asarda ta'kidlanishicha, «joy nomlariga qarab qadimiy savdo yo'llari, qabila va tillarning tarqalishi, eski qal'a va manzillarnish o'rinlari, suv va dovonlarniig hosiyatlari, foydali qazilmapar, cho'llarda quduqlarning bor-yo'qligi, joyning o'simlik. hayvonot va iqpimiy xususiyatlari, hunar-kasb, tarixiy voqealar, afsona-rivoyatlar va boshqa xil mag.lumotlarni bilim olamizki, bular xammasi xalk xo'jaligi, madaniyatimiz tarixi uchun juda muximdir.

Ma'lumki, snomastik mate)jial har qanday rivojlangan til lugat boyligining katta kismini tashkil etadi. Shusha ko'ra onomastik materialni xuddi tarix, geografiya, astronomiya kabi fanlar singari maxsuye o'rganish talab kilinadi.

Bu jihatdan qadimdan shakllangan va hozirda ijtimoiy-iqtisodiy, madaniy rivojlanish yo'lini bosib o'tayogan Paxtachi tumani toponimlarining leksik-semantik, onomastik, grammatik xususiyatlarini, kelib chiqish asoslarini lingvogeografik, etnolingvistik hamda kelib chiqish xususiyatlarini o'rganish dolzarblik kasb etadi. Samarqand viloyati tumanlaridagi hududlar toponimlarini tumanlar kesimida lingvistik tahlil etish mamlakatimizning qadimiy va zamonaviy tarixini o'rganish nuqtai nazaridan muhim ahamiyat kasb etadi. Bugungi kunda o'zbek xalqining ko'hna tarixining guvohi bo'lgan toponimlarni tumanlar bo'ylab to'plash va ilmiy baholash o'zbek nomshunosligining dolzarb vazifalaridan biri hisoblanadi. Chunki hozirgi paytda nomlarning qo'yilish sabablarini, ushbu nodir lisoniy boyliklarning ma'nolarini, ularhaqida to'qilgan rivoyatlarni biladigan keksa avlod vakillari kundan kunga kamayib bormoqda.

Paxtachi tumani etnotoponimlarining atalish motiviga ko'ra turlaridagi etnotoponimlar quyidagicha tasnif qilingan:

Tarkibi urug' va qabila nomlari asosida shakllangan etnotoponimlar. Hozirda unutilgan etnik qatlamlar nomlarining o'zbek xalqi va millatining shakllanishidagi o'rni beqiyos bo'lib, tilimizda joy nomlari sifatidagina saqlanib qolgan. Ularni qaysi urug'ga mansubligiga ko'ra shartli ravishda quyidagicha guruhlash mumkin.

Nufuzli urug' va qabila nomlari asosida yuzaga kelgan etnotoponimlar. Viloyat hamda tuman hududida arab, o'zbek, mo'g'ul, qipchoq, tojik, qozoq, qirg'iz, turkman xalqlari nomlarini tashkil etgan etnonimlar asosidagi joy nomlari ko'p uchraydi. Masalan: Mang'it, Nayman, Boyto'p, Mitan, Bahrin, Keshtali, Hunarmand, Qiltamg'ali, Qirguli, Bekto'bi, Lo'li, Mo'ltoniqishloq, Xo'ja, Urganji, Boyto'p, Damiuyg'ur, Qassobto'p, Qirg'iz aholi punkti, Mavri, Saroy. Qarnob, Ketmonchisoy, Donishmandlar, Qozoqota, Bo'riota, Darveshota, Eshonto'p kabi. Tadqiqot natijalari shuni ko'rsatadiki, mitan etnonimi 50 dan ortiq joy nomi tarkibida uchraydi. Bu nom bilan bog'liq etnoslar xalq shevalarining shakllanishiga ham kuchli ta'sir ko'rsatgan.

Joy nomlari orasida etnosning ilk makoni, yashash joyiga nisbat berib hosil qilingan bir qator etnotoponimlar uchraydi. Xususan, Bekto'bi, Urganji, Qozoqota nomlarini ifodalovchi aholi punktlari kishilarning avvalgi yashagan joylari nomini anglatadi. Paxtachi tumani hududida obyektning o'rni bilan bog'liq etnotoponimlarni ham uchratamiz, bu nomlar etnosni hududning qaysi o'rinda joylashganini ko'rsatadi. Masalan: Past Burqut. Do'ng, Do'ngboltali, O'rtaqo'rg'on, Jarboshi, Quyibuloq, Quyi Bodoy, Quyi Doyi, O'rta Mesit, Yuqori Chaqmoqli, Quyi Yangiobod, Chap tarmoq. To'g'risoy, To'g'riov, Pastki Burqutkabilar.

Antroponimlarga asoslangan etnotoponimlar: a) kishi laqablari bilan bog'liq etnotoponimlar. Masalan: Qozoqota, Gajak, Boltali, Tashkan, Ishonchli, Yombosh, Suyalota, Bo'riota, Aziztepa, Eshontepa, Xalifaota, Xo'jamatchashma, Ziyovuddin buvi, Go'ro'g'li, Ahmad polvon, Murodtepa, Farovon Yo'ldoshobod,

Mirzo Salimiy, Hayit Elbegi, Juma to‘pchi, Ahmad polvon kabi. Har qanday laqab etnonimga aylanavermaydi, chunki laqab etnonimga aylanishi uchun u faqat bir kishiga emas, balki muayyan toifa kishilar guruhi yoki o‘sha laqab egasining avlodiga taalluqli bo‘lishi kerak. Ana shunda u etnonimga, ya’ni o‘sha laqab egasi urug‘ining nomiga aylanadi; b) kasb-hunar, mashg‘ulot bilan bog‘liq etnotoponimlar. Kishilarning mashg‘uloti va turmush tarzi ayrim toponimlarda o‘z aksini topgan: Bog‘bon, Hunarmand, keshtali, Obodon, Bolg‘ali, Boltali, Ketmonchi, Ko‘rpa, Qayishfurush, Qassobto‘p, Olmazor, Sardoba, O‘rikzor, Oqqum, Darbozaqir, Do‘ltaxona, Ziyolilar, Mixchagar, Sovungar, Jumabozor, Payshanbabor, Chorshanbabor, Ziyovuddin, G‘allakor, Novvoylar kabilar.

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*Eshboev B.
associate professor
Abduraimov B.
student
Department of Geography
Karshi state university*

NATURAL - GEOGRAPHICAL PROBLEMS OF USING THE MOUNTAIN AND NEAR-MOUNTAIN AREAS OF KASHKADARYA REGION

Abstract. The article describes the natural geographical basis of the use of mountain and sub-mountain areas of Kashkadarya region, their impact on landscapes is evaluated, geographical and geo-ecological problems of mountain and sub-mountain natural complexes are described.

Key words: tog` va tog` oldi hududlari, tabiat komplekslari ta`siri, geografik muammolar, geomorfologik muammolar.

Introduction. There are many laws and laws of change and development of nature, learning and knowing them will facilitate the optimal use of resources, the development of landscapes in the direction of destruction, pollution of the environment and impoverishment of resources will be prevented. The natural complexes of mountain slopes, valleys and mountain plains are constantly changing under the influence of gravitational force, large slope, oil-valley winds, underground and surface water flow and other factors. As a result of human economic activities, the placement of industrial enterprises on mountain slopes and valleys, the influence of the above factors causes environmental pollution, destruction, and out of circulation. Man has implemented large-scale creative projects in the mountain and sub-mountain regions and is constantly developing the production forces based on the use of available resources. These large-scale anthropogenic changes (reservoirs, floodplains, railways and highways, canals, hydroelectric nodes, tunnels, various engineering structures) have a long-term stable function if they are compatible with the influence of local natural conditions and factors of the area.

The main part. The use of nature is planned, staged, standardized, acting with a view to the distant future, a tactic of putting resources into circulation in a scientifically based manner, economy, wide use of renewable natural resources if there is another non-renewable alternative (wind, solar energy, etc.), It relies on more use of secondary resources in the production, timely and high-quality reclamation, regular use of low-waste and no-waste technology, full maintenance of environmental cleanliness, achieving favorable environmental conditions, and other principles. In the process of using the natural environment, it is necessary to apply measures for its protection at the same time and some of them in advance,

to replace the toxic chemical substances used against diseases and insects in plants with biometods as much as possible, for polluting and destroying it during the use of nature. it is also important to apply large fines and to apply taxation in some cases to the process of nature use in general.

a) Change of mountain and sub-mountain landscapes. The variability of mountain and sub-mountain complexes is determined by factors such as the composition of the rocks that make them up, the slope of the slope, the level of vegetation cover, and the nature of human economic activity. People often carry out economic activities without fully taking into account the landscape condition, dynamic and development stages of the slopes. The anthropogenic impact can exert different pressure on the current state of the landscape, its dynamic variability and the general direction of development. When the most important resources are used unreasonably, negative changes in the structure and dynamic state of mountain landscapes begin to occur. As a result of this, the law of natural interdependence and influence between landscape components and complexes is violated.

b) Natural geographical problems of mountain and sub-mountain complexes. Since mountain and sub-mountain areas are single, interconnected natural complexes, taking into account the exchange of matter and energy and their one-way movement, they can be called a whole geosystem in a certain sense. Mountain complexes are created, formed and developed at the expense of mountain geosystems. Taking this law into account, all structural and dynamic changes occurring in mountain complexes depend on the scale of natural and anthropogenic functional phenomena and processes. The changes that occur in the cone spreads: the increase or decrease in the thickness of coarse rocks or loess deposits depends on the speed of erosion and floods that occur on the mountain slopes. The presence of heavy metals in the soil of the foothills of the Fergana Valley cones is explained by the production activities of industrial enterprises located on the slopes of low mountains (Zevardi, Zarmas, Karatag, etc.).

c) Current geomorphological problems of mountain and sub-mountain plains. During the former Soviet Union, the main task of geological, geomorphological, glaciological and natural geographical research in Central Asia was to collect data and put them into a system. Many research scientists have dealt with these issues. However, perfect associations were not created based on the comparative analysis of regional data. Below, we will think about some problems that have been published on geomorphology and natural geography and need to be solved by comparative analysis of the data in them. One such problem is the concept of a mountain in family and high school geography education and its classification according to its height.

A hill, height or ridge made of Mesocene deposits cannot be called a mountain. For example, Beltog - Lower Amudarya, Mokhovtog - Fergana Valley, etc. were said to be the wrong mountain by local residents, and the mountain was also written on the maps. However, their absolute height does not exceed 300 m.

Hills with a meso-Cenozoic layer and steep slopes, with skirts and above the sea level can be called a mountain. Z.A. Svarichevskaya (1965), who analyzed the hypsographic curve of the earth's land, classified the mountains according to their height as follows: low mountains - up to 2000 m, medium-high mountains - up to 3000 m, high mountains - up to 5000-5500 m and the highest mountains - more than 5000 m. Taking into account that the average height of land is +875 m, the scientist believes that places with a height of 900 m can be called mountains.

Poslavskaya.O.Yu. (1980-1989) classifies the mountains used for the orography of the territory of Uzbekistan as follows: low mountains - from 350-400 m to 1000-1200 m, medium mountains - from 1000 m to 2500-3000 m to, high mountains - more than 3000 m. He believes that the highest mountains are not in the territory of Uzbekistan (Hazrati Sultan - 4648 m).

It is appropriate to accept the alternative of Z.A. Svarichevskaya's classification of mountains according to the height of the world. In our opinion, it is possible to consider low mountains up to 2000 m, medium-high mountains up to 3000 m, high mountains up to 5000 m, and the highest mountains over 5000 m, but some scientists say 6000 m. This classification corresponds to the morphological and geological structure of the world's mountains.

Location of soils in mountain and sub mountain regions

Soils	Area, thousand hectares	Comparison ratio, %	Height above sea level, meters
High mountain light brown soil	540	4,0	2800-3500
middle mountain brown and brown soils	1662	12,4	1700-2800
Dark gray soils	1055	7,9	750-1200
Typical gray soils	3051	22,7	500-750
Light gray soils	2592	19,3	250-500
Meadow gray and gray-meadow soils	781	5,8	250-500
Alluvial soils of gray soil regions	748	5,6	250-500
Slopes	3000	22,3	-
TOTAL:	13429	100	

4616 hectares of dry land located in this region have 350-900 mm of precipitation on 1371, 1 thousand hectares and are fully supplied with moisture. 2009 thousand ha had 280-300 mm of precipitation, semi-provided with moisture, and 1235, 8 thousand ha had 250-280 mm of precipitation - not supplied with moisture. The ongoing land report shows that the irrigated land area of Uzbekistan on January 1, 2002 is 4,300,000, which makes up 95% of the agricultural production of our republic. Development of new land is decreasing year by year due to water shortage in our republic. As a result, taking into account the fact that the growth rate of the population is higher than the irrigated land, the irrigated

land area per capita is sharply decreasing. In 1980, it was 0.26 ha per capita, in 2000 it was 0.20 ha, in 2010 it was 0.17 ha and in 2020 it was 0.15 ha.

Conclusion. As a result of large-scale floods in the mountainous and mountainous regions, lands used for agriculture are eroded, the fertile soil layer is washed away, and ravines are formed. Incorrect use of land, insufficient volume of work against erosion, incorrect placement of agricultural crops, and irregular grazing of livestock are the reasons for the increase of such processes. The only way to eliminate these shortcomings is to plant fruit and decorative trees on terraces on the basis of special projects, using organizational-economic-agrotechnical, forest melioration and hydrotechnical measures in mountainous regions.

As a result of the conducted scientific and calculation works, it is known that the expenses will pay for themselves in 6-8 years. Judging by the results of the research project carried out in Kashkadarya region, there is an opportunity to plant more than 100,000 ha of fruit trees in mountainous lands in our Republic. The use of such an opportunity is of great importance in the development of agriculture, prevention of water and wind erosion, and preservation of the ecological environment.

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Eshqulova D.A.
Student of Humans Resources Management-121 group
Faculty of Economics and Tourism
Termiz State University

THE EFFECTIVENESS OF MINIMUM WAGE POLICIES IN REDUCING POVERTY

Abstract. Minimum wage policies are often implemented with the goal of reducing poverty and promoting economic equity by establishing a baseline hourly wage that employers must pay their workers. This article explores the effectiveness of minimum wage policies in reducing poverty, examining the theoretical rationale, empirical evidence, and case studies from various countries. While minimum wage policies can lead to increased earnings for low-wage workers, reduced income inequality, and boosted consumer spending, they also come with potential drawbacks, such as job loss, increased business costs, and limited impact on non-standard employment. The mixed results in empirical studies suggest that the impact of minimum wage policies on poverty is complex and influenced by a range of factors, including labor market dynamics, economic trends, and policy design. By analyzing these issues, this article aims to provide a balanced perspective on the effectiveness of minimum wage policies in reducing poverty and offer insights for policymakers, economists, and social justice advocates.

Keywords: Minimum wage, poverty reduction, income inequality, labor market, economic policy, job loss, social justice, wage policies, empirical studies, case studies.

INTRODUCTION

Minimum wage policies have long been advocated as a tool to combat poverty and promote economic equity. The concept of a minimum wage is straightforward: establish a baseline hourly wage that employers must pay their workers. The goal is to ensure that even the lowest-paid employees earn enough to meet basic living standards. This article examines the effectiveness of minimum wage policies in reducing poverty, considering both the theoretical underpinnings and the empirical evidence. While minimum wage policies are intended to uplift low-income workers and decrease income inequality, they also come with potential drawbacks that can impact their success in reducing poverty. The rationale behind minimum wage policies is rooted in social justice and economic theory. Proponents argue that a minimum wage can raise the income of low-wage workers, enabling them to afford essentials such as housing, food, and healthcare. In doing so, minimum wage policies aim to reduce the prevalence of working poverty, where individuals work full-time but still struggle to meet their basic needs. Additionally, minimum wage policies are seen as a means to address

income inequality by redistributing wealth from employers to employees. By mandating higher wages, these policies aim to reduce the wage gap between low-income and high-income workers, thereby promoting a more equitable society.

METHODOLOGY

Minimum wage policies have been implemented across various countries with the aim of reducing poverty and promoting economic equity. The underlying assumption is that by setting a minimum hourly wage, workers at the lowest income levels will earn enough to support a basic standard of living, thereby reducing poverty. However, the relationship between minimum wage policies and poverty is complex, influenced by a range of factors including labor market dynamics, the broader economy, and social policies. In this section, we will explore the empirical evidence, theoretical arguments, and real-world case studies to understand the effectiveness of minimum wage policies in achieving their poverty-reduction goals.

Theoretical Framework: How Minimum Wage Policies Aim to Reduce Poverty. The core idea behind minimum wage policies is to provide a wage floor that ensures workers receive fair compensation for their labor. By establishing this baseline, policymakers hope to reduce the number of people living in poverty, particularly those who work full-time yet earn insufficient income to meet their basic needs. This concept aligns with the principles of social justice and equity, aiming to protect workers from exploitation and improve their quality of life. A key aspect of minimum wage policies is their role in addressing income inequality. By mandating a minimum wage, governments can help redistribute wealth from employers to workers, particularly those in low-paying jobs. This redistribution can reduce the wage gap and promote a more equitable distribution of income across the labor force. Additionally, minimum wage policies may contribute to increased consumer spending by providing workers with more disposable income, which can, in turn, stimulate economic growth. The impact of minimum wage policies on poverty reduction varies across different demographics makes. Studies show that increasing the minimum wage is particularly low-income workers, it will be useful for women and minority groups who are high in low-paying jobs. This weak the minimum wage policy by improving the income of the population is the imbalance of poverty can contribute to reduction.

RESULT

The effectiveness of minimum wage policies in reducing poverty is a complex and multifaceted topic that has generated significant research and debate among economists, policymakers, and labor advocates. The results of the systematic literature review illuminate key aspects of this debate and provide insight into the impact of minimum wage policies on poverty reduction. One of the main results of this study is the positive effect of the minimum wage policy on income distribution. Many studies show that a higher minimum wage leads to a narrowing of the wage gap between low- and high-income earners, thereby

promoting a more equitable distribution of income. While some studies have found a significant link between higher minimum wages and poverty rates, others have found a more modest effect. The impact of minimum wage policies on poverty reduction depends on a variety of factors, including initial levels of poverty, the size of the minimum wage increase, and the overall structure of the labor market. It is important to consider that minimum wage policies are one of many anti-poverty tools, and their effectiveness may be influenced by broader socio-economic conditions and policy contexts.

Empirical Evidence: Mixed Results on Minimum Wage Policies and Poverty Reduction. Empirical studies on the impact of minimum wage policies on poverty have yielded mixed results, with some research indicating positive outcomes and others suggesting negligible or even adverse effects. To understand these conflicting findings, it's important to consider the broader context in which minimum wage policies are implemented, including labor market conditions, economic trends, and complementary social policies.

Case Study: The United States. In the United States, minimum wage policies vary by state, providing a diverse set of case studies. Some states have significantly higher minimum wages than the federal standard, while others adhere to the federal minimum wage. Research on the impact of minimum wage increases in the U.S. has shown mixed results. Some studies suggest that raising the minimum wage has led to increased earnings and reduced poverty rates, while others indicate potential job loss and adverse effects on small businesses.

Case Study: The United Kingdom. The United Kingdom introduced the National Minimum Wage in 1999, followed by the National Living Wage in 2016. These policies aimed to combat poverty and reduce income inequality. Studies on the impact of these policies suggest that they have contributed to higher earnings for low-wage workers and reduced income inequality. However, there are concerns about the impact on employment and business costs.

Case Study: South Korea. South Korea has implemented significant minimum wage increases in recent years, aiming to address income inequality and improve living standards. The rapid increase in the minimum wage has had mixed outcomes, with some reports of job loss and business closures, while others indicate positive effects on workers' earnings.

CONCLUSION

In conclusion, the effectiveness of minimum wage policies in reducing poverty is a complex and multifaceted issue. While these policies can lead to increased earnings, reduced income inequality, and boosted consumer spending, they also come with potential drawbacks, including job loss, increased business costs, and limited impact on non-standard employment. The mixed empirical evidence underscores the importance of considering the broader context in which minimum wage policies are implemented. Policymakers must balance the intended benefits of minimum wage policies with their potential risks.

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*Farmanov J., PhD
senior lecturer
Karshi Engineering Economics Institute
Uzbekistan
Shamshiyeva A.
student
Karshi Engineering Economics Institute
Uzbekistan*

SUPPORTING FINANCIAL INSTITUTIONS TO FACILITATE DIGITAL TRANSFORMATION IN THE BEEKEEPING INDUSTRY

Abstract. The article describes the organizational and economic levers for promoting the transformation of digital technologies in the beekeeping industry. Proposals for subsidizing the implementation of digital technologies in the network are described. Also, in order to support structures that finance the implementation of digital technologies, the organization of the «Technological transfer in beekeeping» fund and the sources of its financing are disclosed.

Key words: beekeeping, digitalization, incentives, digital technologies, subsidies, «Technological transfer in beekeeping», 3D devices, satellite navigation, Big Data.

Introduction

The experience of developed countries shows that activities related to the digitalization of agriculture are always carried out under state control and with the help of support mechanisms. In particular, in technologically developed countries such as the USA, Germany and Japan, where the share of the private sector is high and the quality of service is high, the issue of digitalization of agriculture is entrusted to the state.

Namely, the need for organization and economic stimulation of the industry is increasing, and the goal of obespecheniya is the need for the population of our country and natural and organic products, the development of beekeeping and the goal of increasing the productivity of agricultural culture and the establishment of modern innovative technologies.

Main part

Based on our research, we believe that organizational and economic levers should be widely used as ways to drive digital transformation in beekeeping. In particular, in the organizational direction it is advisable to implement the following tasks:

- organization of «Smart hives», conducting research and experiments related to adaptation to the climatic conditions of our country;
- improving the legal framework for the use of digital devices and remote controls and creating a system that is simple for everyone;

- holding seminars on popularization, propaganda and explanation of the use of digital devices;

- organization of bee farms equipped with intelligent devices for the targeted and orderly use of forest lands, etc.

We also believe that the following tasks must be completed as economic directions for promoting the introduction of digital technologies in beekeeping. Including:

- introduction of a system of preferential lending to farms that have fully implemented digital technologies and improvement of the insurance system;

- financial support for enterprises producing smart devices through cooperative relations with the economy;

- introduction of a system of stratified subsidies for farms that have implemented digital technologies for a certain percentage of the total number of bee colonies;

- organization, development, etc. funds helping to financially support the implementation of digital technologies in beekeeping.

The role of each of these organizational and economic levers in practice is incomparable, which is confirmed in monographic studies. It was noted that insurance, preferential lending, subsidies, and the formation of separate industry financing funds would have a positive effect.

Therefore, our research is based on a scientific proposal with special emphasis on subsidies, the creation of special funds and their financing. In particular, an analysis of questionnaires conducted in the regions shows that if one apiary contains an average of 1 pavilion (32 hives, 64 families), then at least 4 hives (12.5 percent) must be equipped with digital technology under constant monitoring. Only then will it be possible to monitor the daily condition of the bees in minimal real time.

Based on this, it is proposed to establish a minimum criterion for allocating subsidies for digitalization for beekeeping farms. It is advisable to introduce a stratified subsidy system for farmers who meet this criterion at a minimum level and are interested in increasing it in accordance with the number of cells in the pavilion (table 1).

Table 1

Subsidy system for beekeeping farms that have implemented digital technologies and its levels

Amount of subsidy	Minimum criteria	Differentiated use		
		Completed the minimum requirement	introduced to 30 percent	introduced to 50 percent
In the amount of 5 times the amount of the basic calculation	Introduction of digital technology in 12.5% of the total number of hives	1,0	5,0	10,0
It is also possible to introduce coefficients by region and type of enterprise				
	For mountain and sub-mountain beekeeping	1,0	5,0	10,0
	For beekeeping in cotton	1,0	8,0	12,0
	For desert and semi-desert beekeeping	1,5	6,5	11,0

When subsidizing beekeeping farms that have implemented digital technologies, it is proposed to allocate a subsidy in the amount of 5 billion cubic meters based on the actual assessment as of 2023.

This amount should be increased 5 times for farms that contributed it to 30% of the total number of nests on the farm, and if it was contributed to 50%, then it should be applied 10 times.

At the same time, this amount is used for mountain and foothill beekeeping, given the high impact of chemicals for honey producing farms in cotton-growing areas, coefficients of 8 to 12 are proposed, respectively 30% and 50%.

The increasing role of the private sector in market relations is a natural process and at the initial stages of state subsidies serves to create enterprises and widely promote new technologies and in the future it should work with the help of market mechanisms.

For this purpose, it is advisable to create structures that finance the implementation of these technologies and support agencies. Therefore, we consider it necessary to create a fund «Technological transfer in beekeeping» in our research (Fig. 1).

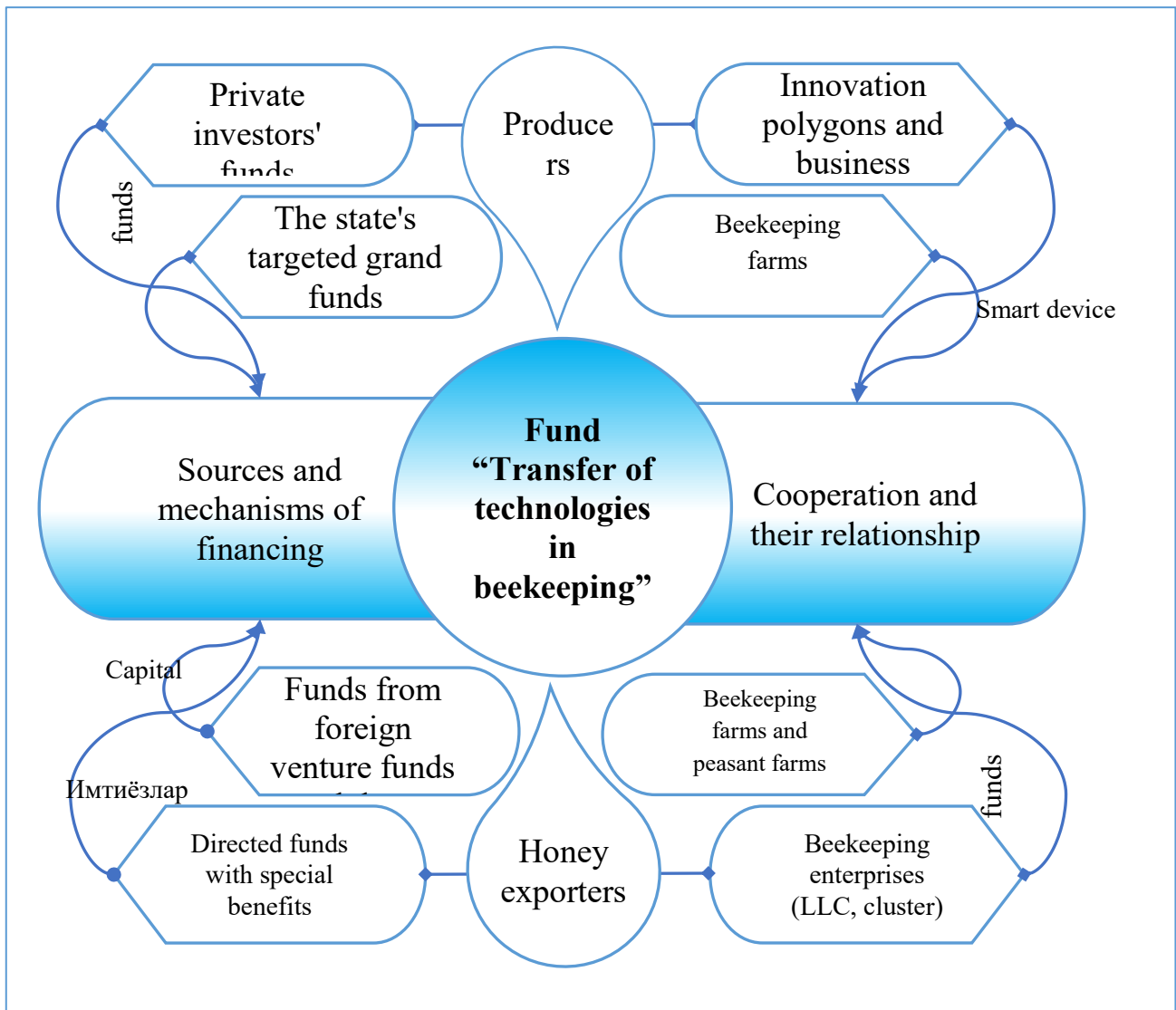


Figure 1. Technical and economic relations of the fund «Transfer of technologies in beekeeping»

The purpose of creating the fund is to financially support the introduction of modern digital technologies in beekeeping farms, providing them with preferential loans, promoting the introduction of new technologies into practice, as well as increasing the interests and skills of beekeeping farms.

In the course of its activities, this fund performs the following tasks. In particular:

- strengthening the material and technical base of beekeeping farms, introducing digital technologies, allocating credit resources for training purposes and further expanding their use;
- financial support for the innovative activities of honey farmers, stimulation of the creation, production and implementation of modern devices;
- financing of targeted state, industry and regional programs, scientific and technical projects aimed at the development of beekeeping, as well as participation in the implementation of these events;

- support the activities of honey producers, processors and service providers in need of working capital when introducing digital technologies;
- establishing leasing activities in order to provide special vehicles, equipment, devices for transporting honey and beekeeping products, as well as cooperation with interested parties for these purposes.

Digital technologies in beekeeping not only increase production efficiency and improve product quality, but also contribute to more precise resource management, lower costs and improved sustainability of the entire industry. This trend is gaining momentum and digital technology is expected to continue to transform beekeeping in the future.

When forming the financial resources of this fund, together with target and donor funds of the state, sources for the formation of funds aimed at special and general benefits are proposed (Fig. 2).

According to it, as a special incentive, it is proposed to allocate funds to the population in the amount of 20% of the market value of land allocated for beekeeping and 50% of the value added tax and duty on imported honey products and bee equipment.

Also, as a general incentive, it is desirable to create funds formed by allocating 15% of the cost of commercialization of research related to digital devices, as well as by allocating 50% of the tax benefits provided as a result of the implementation of smart hives.

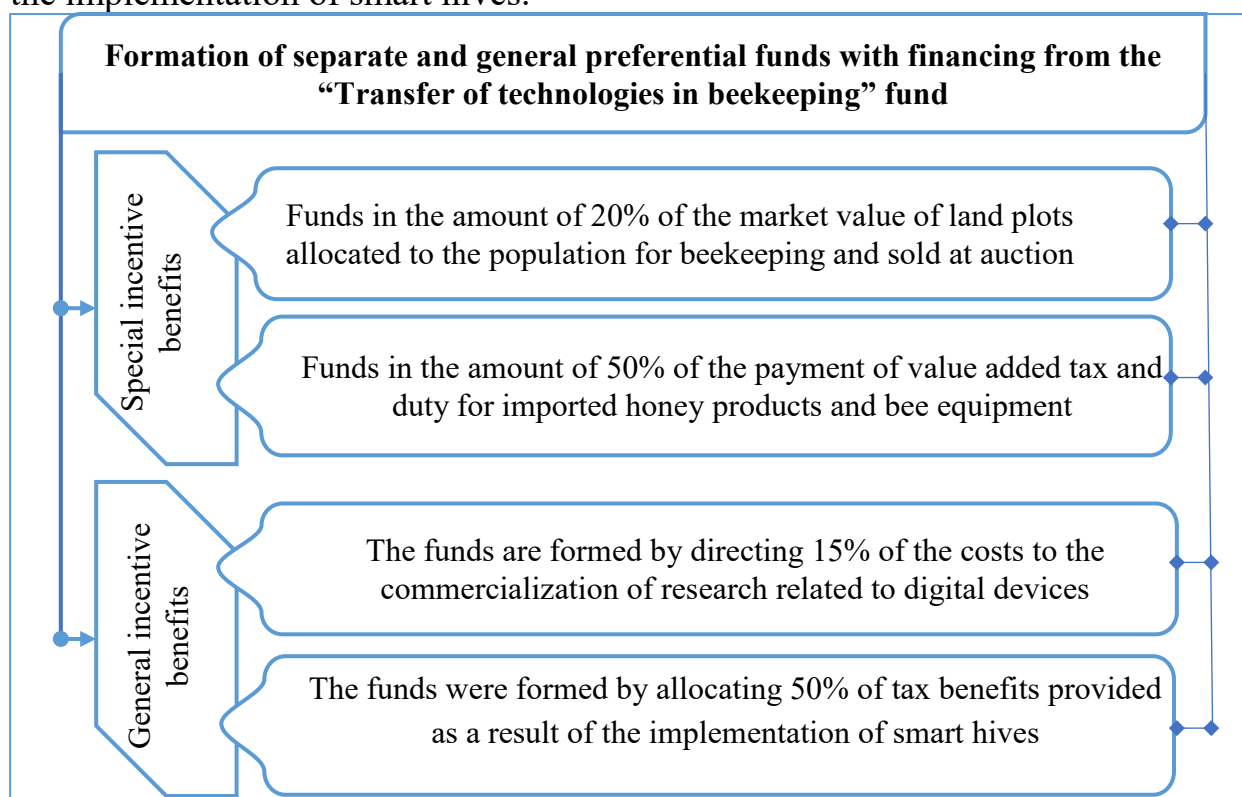


Figure 2. Formation of funds allocated with special benefits to finance the Fund «Transfer of technologies in beekeeping»

Conclusion and suggestions

By creating the «Technology transfer in beekeeping» fund we will achieve the following:

- digitalization of beekeeping;
- attracting the private sector to the implementation of «smart» hives;
- expand the scope of implementation of innovative projects carried out in the field;
- commercialization,
- create conditions for material, technical and financial stimulation of farms;
- on the other hand, it serves to create a number of effects, both social (food safety, development of science, technological weapons, skills formation) and economic (high profits, the presence of a competitive market segment, reduced unemployment).

Supporting financial institutions to facilitate digital transformation in the beekeeping industry is imperative for fostering innovation, enhancing productivity, and ensuring sustainability in beekeeping practices. This initiative holds the potential to revolutionize traditional beekeeping methods by integrating digital technologies, thereby addressing challenges and capitalizing on emerging opportunities in the sector.

In conclusion, supporting financial institutions to facilitate digital transformation in the beekeeping industry is essential for unlocking the full potential of digital technologies to enhance beekeeping practices, promote economic growth, and contribute to environmental sustainability. By implementing these suggestions, stakeholders can create an enabling environment for beekeepers to embrace digital innovation and thrive in the digital age.

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Fayziyev Z.F.
bachelor student
«Corporate governance» faculty
Tashkent State University of Economics
JEL classifications: G30 G32 G34 G38 M14
Paper type: Research
ORCID number: 0009-0002-6551-4778

IMPROVING CORPORATE GOVERNANCE SYSTEMS IN STATE-OWNED ENTERPRISES

Annotation. Corporate governance in state-owned corporations (SOCs) presents a unique blend of challenges and opportunities, significantly shaped by their dual objectives of achieving commercial success while fulfilling public policy mandates. These enterprises, owned or controlled by the state, operate in various sectors, from utilities and transportation to energy and telecommunications, often holding monopolistic or significant market positions. Unlike private firms, where governance focuses primarily on shareholder value maximization, SOCs must balance commercial goals with socio-economic responsibilities. This often includes delivering public services at reasonable costs while ensuring financial viability and operational excellence. However, corporate governance in SOCs is fraught with complexities due to potential conflicts between the government's role as owner and regulator.

Keywords: descriptive statistics, correlation coefficient, regression analysis, histogram, graph-box, ANOVA table, Normality test, Collinearity test, Shapiro Wilk test.

Introduction

SOCs especially in Asian countries, are made up of more than independent corporations and they are controlled directly by agencies and ministries of Uzbekistan. On 14th January 2019 under PF-5630 orders of the President of Uzbekistan Mirziyoyev Sh. M. 'State Asset Management Agency' was established to control and oversee all corporations, LLCs, and small businesses that the government is involved in. The establishment of the State Assets Management Agency of the Republic of Uzbekistan involved the transfer of staff units from the liquidating State Competition Committee and the State Assets Management Center. Additionally, the Agency was entrusted with the management of state assets, including those abroad, the execution of privatization measures (specifically, the sale of state shares), the leasing of state properties, the implementation of corporate governance in enterprises with state participation, the financial rehabilitation of economically distressed enterprises with state participation, and the regulation of bankruptcy, appraisal activities by the state. The Agency also oversees the approval of property valuation standards and the

certification of realtors, thereby assuming responsibilities, functions, and authorities in these areas.

State Asset Management Agency plays a profound role in the economics of Uzbekistan.

Introduction to the organizational and legal structure of the corporate entity

1. The firm: «State Asset Management Agency»

Address: 6 Amir Temur shoh Street, 100000, Tashkent,, Republic of Uzbekistan

Contact: +998(71) 259-21-37

E-mail: info@davaktiv.uz

2. The CEO: Ortikov Akmalxon Jo‘raxonovich

3. Economic activity of the firm: Reporting and oversight of Government Assets

4. The form of property ownership: Government agency

5. Form entrepreneurship: state-owned unitar entity

6. Date of establishment: January 14th, 2019

7. Number of workers: 400.

8. Product (service) produced (served) by the firm: information technologies and systems.

The corporate structure of the Agency

An agency's corporate structure is different than normal corporations as it contains hundreds of different entities with different types of corporate structures and works in different spheres of the economy. Currently all executive directors directly report to Prime minister of Uzbekistan and President of Republic of Uzbekistan. The Director of the Agency, the First Deputy Director, and other Deputy Directors are appointed and dismissed by the President of the Republic of Uzbekistan, based on the recommendation of the Prime Minister of Uzbekistan. Their status, as well as their medical and transportation service conditions, are respectively equivalent to those of a Minister, the First Deputy Minister, and Deputy Ministers. The Director of the Agency, the First Deputy Director, Deputy Directors, and Agency staff have the right to be elected as members of the supervisory boards of economic associations in accordance with established procedures. The appointment of the heads of the Agency's regional departments is carried out by the Director of the Agency, in agreement with the Chairman of the Council of Ministers of the Republic of Karakalpakstan, governors of regions, and the mayor of Tashkent City. The medical assistance procedure provided for the employees of the dissolved State Competition Committee will be maintained for the employees of the Agency. In the Agency, the application of the main positions and professional classifications of workers requires a minimum education level of a relevant foreign higher education degree for specialists in respective fields. In defining the qualifications for various worker professions, an exception is made with an advisory nature. The corporate policy for effective management of state assets entails the implementation of a unified state strategy focused on enhancing the governance and operational efficiency of enterprises

with state participation. This includes exercising the rights of shareholders with respect to the state's equity stakes in these enterprises, ensuring a proactive and responsible role in their management.

A pivotal aspect of this policy is the introduction of modern corporate governance practices derived from advanced international experience. This strategic approach significantly strengthens the role of supervisory boards and shareholders in the management of state-participated enterprises, ensuring more robust oversight and decision-making processes. Additionally, the policy supports the transformation of state-participated enterprises into competitive and efficient market players. This transformation is facilitated through a structured and phased approach that incorporates best practices and recommendations from international financial institutions, aiming to make these enterprises viable competitors in both local and global markets.

To further the objectives of transparency and efficiency, there is a commitment to optimizing management structures within these enterprises. This includes increasing profitability and capitalization, divesting from non-core and underutilized assets, and implementing strategies that are designed to boost operational effectiveness. Furthermore, the policy emphasizes maintaining the transparency of operations and developing a robust system for monitoring the fulfillment of investment and social obligations by investors. In terms of financial strategies, the policy advocates for an effective dividend policy in collaboration with the Ministry of Finance of the Republic of Uzbekistan, ensuring that state interests are adequately represented and financially beneficial outcomes are achieved. The strategy also includes the facilitation of equity and bond issuances, including IPOs and SPOs on both local and international stock exchanges, to attract direct foreign investments as well as portfolio investments. Moreover, the policy extends to the regulatory aspects of property valuation, establishing standards for property appraisal, and the certification of real estate agents, thereby ensuring a regulated and standardized approach across the sector. Finally, the policy also encompasses the identification and rehabilitation of non-operational, low-profitability, and loss-incurring enterprises. This includes the development and implementation of financial recovery and operational efficiency programs, thereby enhancing overall corporate health and productivity. The execution of state policy concerning bankruptcy proceedings further underscores the commitment to a structured and legally compliant approach to managing enterprises facing financial distress. The full structure of how the agency operates still remains unclear. Still, all documentation and assumptions made during the internship reveal that they operate similarly to those of the ministry. There is less open data regarding the financial and internal structure of the agency.

The results of analysis of open-source non-confidential data resources²⁸

	Unit of measure	2021	2022	2023	Description
Charter capital	thousand sums	-	-	-	
Increase in charter capital	-	-	-	-	N/A
Decrease in charter capital	-	-	-	-	N/A
Allocation of charter capital	%	100	100	100	
State-owned share	%	100	100	100	
Private sector share	%	0	0	0	

There are indicators regarding assets of SAMA holds publicly available in their website but regarding their data as agency lacking despite being public company of government. Table above describes only about how many percentage of agency belongs to government which is hundred percent of it.

Table №3**Main organizational indicators of the «State Asset Management Agency»²⁹**

Normative document name	Description
Annual general meetings	N/A
Information and disclosure policy.	The document on information and disclosure policy is publicly available on their website, but the trade union, HRM, and Accounting departments are responsible for effective information channels between the executive body and employees and reports on their activities
Dividend policy	N/A
Executive body	President of Uzbekistan
Internal audit service	N/A
Internal control	N/A
CG code	N/A
Supervisory board.	N/A
Audit Committee	N/A
Strategic development committee	Strategic development goals and directions are organized and developed by the Department of «Strategic Development»
Remuneration and Nomination Committee.	The functions of the committee are fulfilled by the HRM department

²⁸ O'zbekiston Respublikasi Davlat aktivlarini boshqarish agentligi. (n.d.). <https://davaktiv.uz/oz/corporate?type=jsc>

²⁹ O'zbekiston Respublikasi Davlat aktivlarini boshqarish agentligi. (n.d.). <https://davaktiv.uz/oz/corporate?type=jsc>

Prevention of conflict of interest.	N/A
Minority shareholders committee	N/A
Code of Ethics	The company has a document that specifies the norms of ethics that were established by the trade union and functions in the «comply or explain» principle

Table №3 illustrates a list of normative documents and their alternatives that are established by the «SAMA».

Analysis of individual trust in government-owned corporations

The research was done primarily among Corporate Governance students and workers in this sphere regarding the trust of individuals to invest in Government-owned corporations and its relation to the corporate system and dividend policy of the corporation

Gender (Jinsingiz)

- o Age (Yoshingiz)
- o Education Level (Ta'lim darajangiz)
- o Employment Sector and Location (Siz mehnat faoliyatini olib borayotgan tashkilot joylashgan hudud)
- o Company Orientation (Kompaniya yo'nalishi)
- o Level of financial information disclosure
- o Easyness of investing in stock markets
- o Dividend payment expectation
- o Factors while investing in state-owned corporations
- o Level of confidence to invest in Government owned corporations

The survey is distributed electronically via platforms that cater to citizens and individuals within the country.

Methods

1.1 Pearson Correlation Analysis

To identify the relationship between given variables Pearson Correlation Analysis has been conducted. This analysis allows us to assess the strength and direction of linear associations between variables and the perceived effectiveness of educational program. Correlation coefficients and associated p-values are used to identify significant correlations.

1.2 Comparative Analysis

In addition to the statistical analysis mentioned above, a comparative analysis was carried out to explore any notable differences in program effectiveness across various demographic and control factors. This involved subgroup analyses based on gender, occupation, and age. Comparative statistics, such as means, proportions, and confidence intervals, are in use to highlight any significant disparities in evaluating role of corporate governance among these subgroups.

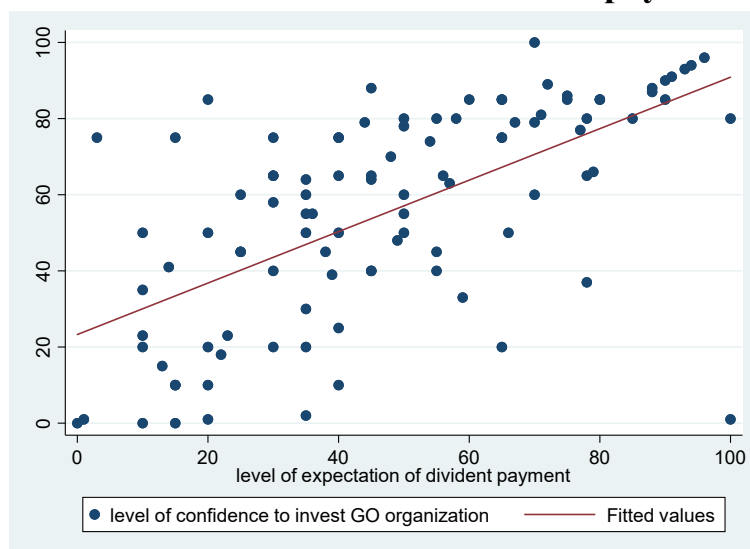
Descriptive Statistics³⁰

Variable	Obs	Mean	Std. Dev.	Min	Max
confidence level	100	55.66	28.039	0	100
divident payment	100	47.9	25.899	0	100
disclosure rate fi~e	100	2.17	.817	1	3
factors	100	2.72	1.464	1	5
level investing	100	2.22	.811	1	3
age	100	36.12	13.441	15	76
gender	100	1.62	.488	1	2
degree	100	2.45	1.417	1	5
working sector	100	2.55	1.158	1	4
location	100	3.1	1.345	1	5

Table 4: Descriptive analysis of the dataset

In this table, descriptive analysis of evaluation of 100 respondents on investment level of citizens and 4 question was illustrated. The average point given by survey participants was 55.66, while points ranged from a minimum of 1 to a maximum of 100. Confidence level, Dividend payment and disclosure level of financial documents, and easiness to enter the stock market. The first 3 dependent variables were measured in ordinal type of measurement comprising of low, medium, and high parameters and the fourth was in numeric.

In this research we do not emphasize on demographic questions such as education degree, gender, working experience, age and occupation.

2-Picture. Confidence level in GOC and dividend payment expectation³¹

Scatter plot you sent me shows a positive correlation between confidence level in GOC (Global Organization Credit) and dividend payment expectation

³⁰ Data obtained through survey conducted by researcher via online forms

³¹ Data obtained through survey conducted by researcher via online forms

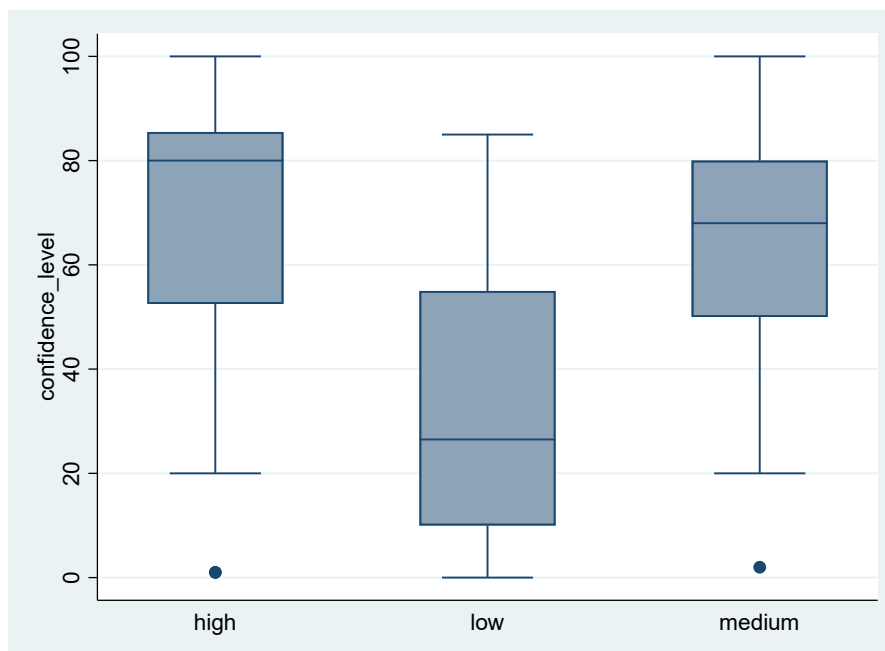
analysis. This means that as the confidence level in GOC increases, the expectation of dividend payment also increases.

The data points in the scatter plot are clustered in the upper right quadrant, which means that there is a positive relationship between the two variables. The fitted line shows the general trend of the data, and it is also upward sloping, which confirms the positive correlation.

It is important to note that correlation does not imply causation. Just because there is a positive correlation between confidence level in GOC and dividend payment expectation analysis does not mean that one variable causes the other. There could be a third variable that is causing both of these variables to change.

For example, perhaps a strong economy leads to both higher confidence levels in GOC and higher expectations of dividend payments.

3-Picture. Confidence level and Financial documents disclosure³²



Box plot showing a comparison between high, medium, and low confidence levels. The box plot shows the distribution of the confidence level for each group.

The horizontal line in the middle of each box represents the median confidence level. The box contains the middle 50% of the data. The whiskers extend to the lowest and highest values within 1.5 times the interquartile range (IQR) from the median. Values outside this range are considered outliers and are plotted as individual points.

Here are some specific observations about the boxplot:

- The median confidence level is higher for the high group compared to the medium and low groups.

³² Data obtained through survey conducted by researcher via online forms

- The interquartile range is wider for the medium group compared to the high and low groups, which means that there is more variability in the confidence level for the medium group.

- There are a few outliers in the low group, which means that there are a few data points in the low group that are much lower than the rest of the data in that group.

Overall, the box plot suggests that there is a positive relationship between confidence level and the group (high, medium, or low).

Table №5

Pearson Pairwise correlations ³³					
Variables	(1)	(2)	(3)	(4)	(5)
(1) confidence_level	1.000				
(2) divident_payment	0.624*	1.000			
(3) disclosure_rat~e	(0.000) -0.185	-0.153	1.000		
(4) factors	(0.065) 0.093	(0.129) 0.111	0.099	1.000	
(5) level_investing	(0.358) 0.117	(0.271) 0.114	(0.326) 0.141	0.035	1.000
	(0.246)	(0.261)	(0.161)	(0.727)	

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table Pairwise correlations

Pearson correlation coefficient matrix. It shows the correlation between different variables.

Specifically, this matrix shows the correlation between confidence level, dividend payment, disclosure rate, factors, level investing, age, gender, degree, working sector, and location.

Each value in the table represents the correlation coefficient between two variables. The correlation coefficient ranges from -1 to 1. A correlation coefficient of 1 indicates a perfect positive correlation, while a correlation coefficient of -1 indicates a perfect negative correlation. A correlation coefficient of 0 indicates no correlation.

Here are some of the correlations that you can see in the table:

- There is a positive correlation between confidence level and dividend payment (0.624). This means that as confidence level increases, dividend payment is also expected to increase.

³³ Data obtained through survey conducted by researcher via online forms

• There is a weak positive correlation between confidence level and disclosure rate (0.185).

• There is a weak positive correlation between confidence level and factors (0.093).

• There is a weak positive correlation between confidence level and level investing (0.246).

It is important to note that correlation does not imply causation. Just because there is a correlation between two variables does not mean that one variable causes the other. There could be a third variable that is causing both of these variables to change.

Table №6

Linear regression ³⁴							
confidence_level	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
: base high	0	.	.	.	.	.	.
low	-	6	-	.	-	-	*
	18.6	.964	2.68	009	32.497	4.825	**
	61						
medium	1.01	5	0	.	-	11	
	2	.36	.19	851	9.637	.662	
: base	0	.	.	.	.	.
Accountability							
Fairness	-	6	-	.	-	4.	
	7.52	.285	1.20	234	20.014	959	
	8						
Responsibility	5.89	6	0	.	-	19	
	3	.743	.87	385	7.504	.29	
Transparency	1.87	6	0	.	-	13	
	7	.009	.31	755	10.061	.815	
clear division of	3.40	6	0	.	-	16	
work	2	.822	.50	619	10.151	.956	
: base high	0	.	.	.	.	.
low	-	6	-	.	-	4.	
	9.21	.715	1.37	174	22.553	129	
	2						
medium	-	5	-	.	-	1.	*
	9.63	.464	1.76	081	20.488	224	
	2						
dividend_payment	.464	.	4	0	.27	.6	*
return		.097	.80		2	56	**
Constant	45.6	8	5	0	29.	61	*
	05	.171	.58		373	.838	**
Mean dependent var		56.410		SD	dependent	28.410	
			var				

³⁴Data obtained through survey conducted by researcher via online forms

R-squared	0.512	Number of obs	100
F-test	10.475	Prob > F	0.000
Akaike crit. (AIC)	900.469	Bayesian crit.	926.520
(BIC)			

*** $p < .01$, ** $p < .05$, * $p < .1$

Table 6: Linear regression

This table illustrates that as long as F-test equals to 10.04 and probability level is 0, there is a significant relationship between control variables and dependent variable. These control variables account for 51% (R-squared) of the dependent variable.

Furthermore, in model estimation table, it is shown that besides dividend payment, the change in ordinal and binary measurement means may result in the increase in dependent variable as p-value is less than 0.05. In dividend payment from taking place can increase confidence to 0.4 average it is applicable in reality as probability test indicates 0 which is lower than 0.05.

linear regression analysis. It shows the relationship between two continuous variables: confidence level in GOC (Global Organization Credit) and dividend payment expectation.

- The vertical axis (y-axis) represents the dividend payment expectation.
- The horizontal axis (x-axis) represents the confidence level in GOC.

The equation for the regression line is shown at the top of the image. It is:
 $y = 1.877 + 0.06964 * x$

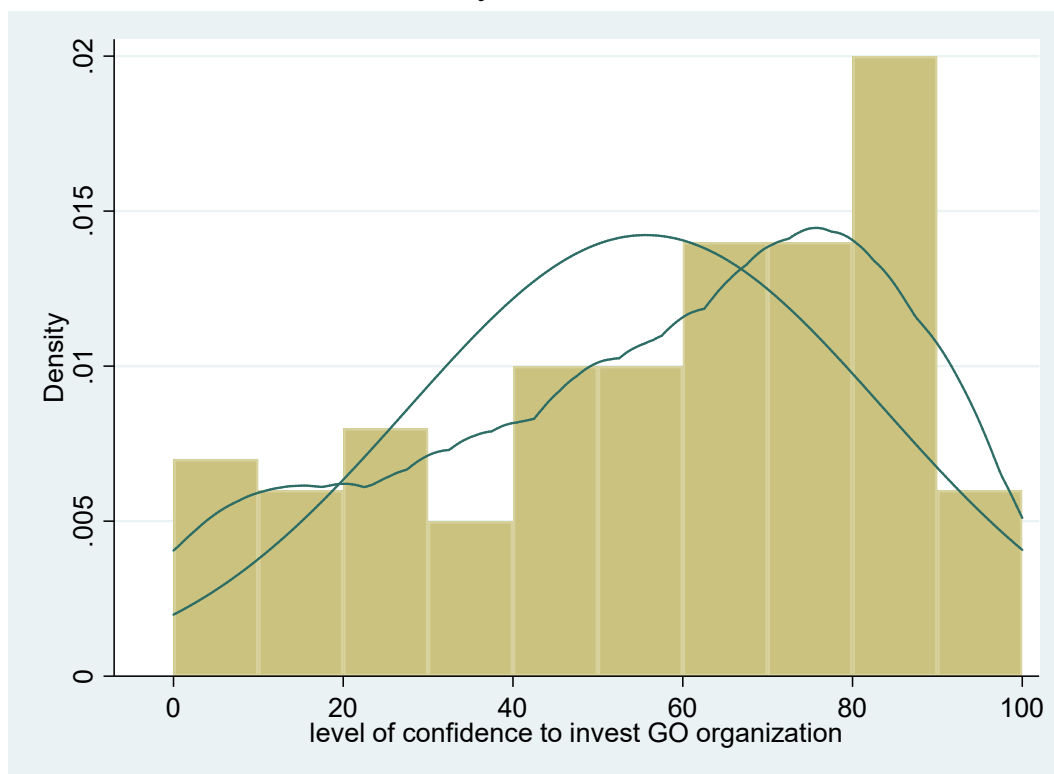
The slope of the regression line is 0.06964. This means that for every one-unit increase in confidence level in GOC, there is a 0.06964 unit increase in dividend payment expectation.

The R-squared value is 0.512. This value indicates that 51.2% of the variation in dividend payment expectation can be explained by the linear relationship with confidence level in GOC. The remaining 48.8% of the variation is due to other factors that are not included in the model.

The p-value is less than 0.001. This means that there is a statistically significant relationship between confidence level in GOC and dividend payment expectation.

Overall, the linear regression analysis suggests that there is a positive relationship between confidence level in GOC and dividend payment expectation. This means that investors are more likely to expect higher dividend payments from companies that they have a higher confidence level in.

Data distribution and density of observants ³⁵



Graph showing the level of confidence to invest in a specific organization over time. The x-axis represents time, likely in months, but the scale is not specified. The y-axis represents the level of confidence, with a scale of 0 to 100.

The data points on the graph show some fluctuations in the level of confidence over time. However, it is difficult to say for sure what the overall trend is without a longer time scale or more data points.

Here are some additional observations about the graph:

- The highest level of confidence is around 78.
- The lowest level of confidence is around 22.
- There is a data point at around month 80 with a confidence level of 100.

It is important to note that this graph only shows the level of confidence to invest in this organization. It does not tell us anything about the actual performance of the organization or whether it is a good investment.

³⁵ Data obtained through survey conducted by researcher via online forms

Shapiro-Wilk W test for normal data³⁶

Variable	Obs	W	V	z	Prob>z
confidence~l	100	0.932	5.646	3.840	0.000
divident_p~t	100	0.978	1.792	1.295	0.098
disclosure~e	100	0.996	0.312	-2.587	0.995
factors	100	0.982	1.497	0.896	0.185
level_inve~g	100	0.993	0.546	-1.341	0.910

For interpreting the results, we typically compare the p-value to a significance level (usually 0.05). If the p-value is less than the significance level, we reject the null hypothesis and conclude that the data is not likely to be normally distributed. Conversely, if the p-value is greater than the significance level, we fail to reject the null hypothesis and tentatively conclude that the data may be normally distributed.

Here are some specific observations from the table:

- **Confidence:** The p-value (0.000) is less than 0.05, so we reject the null hypothesis and conclude that the confidence data is not likely to be normally distributed.

- **Dividend p (payment):** The p-value (0.098) is greater than 0.05, so we fail to reject the null hypothesis and tentatively conclude that the dividend payment data may be normally distributed.

- **Disclosure:** The p-value (0.995) is greater than 0.05, so we fail to reject the null hypothesis and tentatively conclude that the disclosure data may be normally distributed.

- **Factors:** The p-value (0.185) is greater than 0.05, so we fail to reject the null hypothesis and tentatively conclude that the factors data may be normally distributed.

- **Level investment:** The p-value (0.910) is greater than 0.05, so we fail to reject the null hypothesis and tentatively conclude that the level investment data may be normally distributed.

- **Age:** The p-value (0.001) is less than 0.05, so we reject the null hypothesis and conclude that the age data is not likely to be normally distributed.

It is important to note that the Shapiro-Wilk test is just one way to assess normality. There are other normality tests available, and the choice of test can depend on the size and characteristics of the data set.

³⁶ Data obtained through survey conducted by researcher via online forms

Post estimation analysis - Collinearity³⁷

Figure 10 - Multicollinearity

Variable	VIF	1/VIF
disclosure~e	1.07	0.938346
divident_p~t	1.06	0.942622
level_inve~g	1.04	0.961386
factors	1.03	0.973783
Mean VIF	1.05	

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The table lists the VIF for each variable, which helps us understand if multicollinearity is a concern. A VIF of **1.05 means there is no correlation** among the independent variable and the others, and generally, a **VIF exceeding 5 or 10 indicates high multicollinearity** that may be problematic. In this case, all variables have a VIF less than 5, actually all of them are even below **1.5, which is very good**. This suggests that **multicollinearity is not a major concern** for this mode

Shapiro-Wilk W test for normal data³⁸

Variable	Obs	W	V	z	Prob>z
yhat	100	0.970	2.491	2.025	0.021
ehat	100	0.970	2.470	2.006	0.022

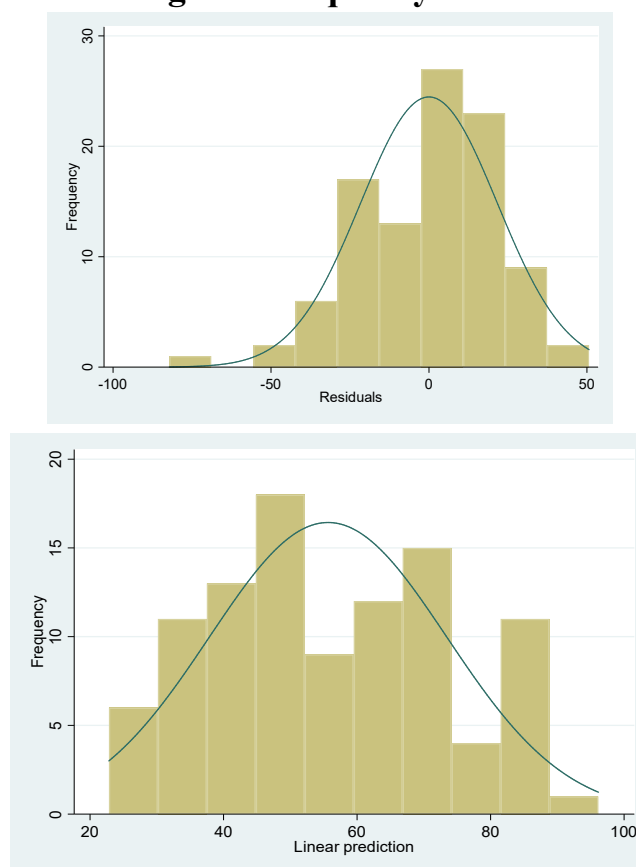
The smaller the p-value, the stronger the evidence against normality. If the p-value is below a certain threshold (often 0.05), we **reject the null hypothesis that the data is normally distributed**.

³⁷ Data obtained through survey conducted by researcher via online forms

³⁸ Data obtained through survey conducted by researcher via online forms

Post estimation analysis – Heteroscedasticity³⁹

Figure- Frequency norm



The bars represent the frequency of outcomes that our linear model has predicted. Each bar's height indicates how many times a linear prediction and residuals occurred.

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity⁴⁰

Ho: Constant variance

Variables: fitted values of confidence_level

chi2(1) = 0.72

Prob > chi2 = 0.3953

Since the p-value is 0.3953, which is much higher than the common significance levels like 0.05 or 0.01, we do **not have enough evidence to reject the null hypothesis** of constant variance in the errors. In other words, based on this test, **there is no statistical evidence of heteroskedasticity** in the model regarding the fitted values of the variable «confidence level».

⁴⁰ Data obtained through survey conducted by researcher via online forms

In conclusion, there exists a nuanced relationship between confidence levels in investing in government-owned corporations and their dividend payment policies. While dividend payments can enhance investor confidence, the extent to which GOCs prioritize dividends over other objectives, such as fulfilling public service mandates, can significantly impact investor perceptions and investment decisions. Balancing these factors is essential for GOCs to attract and retain investor confidence while fulfilling their broader societal responsibilities.

Recommendations

Transparent Dividend Policy:

Establish a clear and transparent dividend policy that outlines the criteria and process for determining dividend payments.

Ensure consistency and reliability in dividend payments, aligning them with the financial performance and profitability of the corporation.

Communicate dividend decisions effectively to investors, providing rationale and insights into how they align with the corporation's strategic objectives.

Enhanced Corporate Governance:

Strengthen corporate governance structures and practices to ensure transparency, accountability, and integrity in decision-making processes.

Implement independent board oversight and oversight mechanisms to mitigate conflicts of interest and promote sound decision-making.

Foster a culture of ethical conduct and adherence to best practices in corporate governance, emphasizing the importance of integrity and accountability at all levels of the organization.

Improved Investor Access to Stock Market:

Facilitate greater investor access to the stock market by promoting liquidity and market efficiency through measures such as enhancing trading platforms, reducing trading barriers, and expanding market participation.

Provide investor education initiatives to increase awareness and understanding of GOCs among retail and institutional investors, empowering them to make informed investment decisions.

Enhanced Disclosure of Financial Documents:

Enhance transparency and disclosure of financial documents by providing timely and comprehensive reporting of financial performance, including audited financial statements, annual reports, and disclosures of material information.

Utilize digital platforms and investor relations channels to disseminate financial information effectively, ensuring accessibility and transparency for all stakeholders.

Comply with international reporting standards and best practices in financial disclosure, demonstrating a commitment to transparency and accountability to investors.

Engagement and Communication:

Foster open and proactive communication with investors, stakeholders, and the public, providing regular updates on corporate performance, strategic initiatives, and key developments.

Encourage constructive dialogue and engagement with investors to address concerns, solicit feedback, and build trust and confidence in the corporation's management and governance.

By implementing these recommendations, government-owned corporations can enhance investor confidence, promote market integrity, and create a conducive environment for sustainable growth and investment.

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*G'afforova X.Ya.
teacher
faculty of preschool education
Termiz State Pedagogical Institute
Raximova X.O.
2nd year student of preschool education*

DEVELOPMENT OF ABILITIES OF STUDENTS OF THE PREPARATORY GROUP BASED ON STEAM EDUCATIONAL TECHNOLOGIES

Abstract. The methods and means of conveying to pedagogues that the formation of STEAM teaching technology in preschool educational organizations is of great importance, the content, forms and ways of using the means of forming STEAM teaching technology in preschool educational organizations are discussed.

Key words: technology, process, pedagogue, education, child, education, approach.

Today, the use of STEAM educational technology, a new teaching method of organizing children's activities in a mixed method, is important in the education of preschool children. The variability of education and training is the basic principle and principle of the development of the modern preschool education system in our country today. This is a variable part of the STEAM program, which ensures the quality of the educational process and creates optimal conditions for their social and personal development, taking into account the physical and mental health of preschool children, the trajectory of individual creative development, psychological and provided pedagogic skills for studying at school and adapting to the surrounding community for physical development.

The socio-economic conditions of our time demand active, friendly and creative citizens of the society. The limited level of development of technical skills hinders the development of children's imagination, paralyzes their initiative and worsens the performance of any of their activities. In connection with the above, an urgent question arose about the introduction of the STEAM education system in preschool educational institutions in order to create an effective educational environment for the development of creative thinking and creative imagination in children based on the acquisition of basic technical skills. followed.

One thing must be said about STEAM, it is not only an innovation in the field of education, but also a significant contribution to the future of the growing young generation, where a child can independently create their own projects, be proactive, creative and easy. communicating with people.

Modern life sets difficult goals for the education sector: to teach a preschool child to live in a world that requires high intellectual abilities. STEAM technologies provide an opportunity to intelligently acquire and implement the acquired knowledge. The introduction of STEAM technologies into the process of environmental education in a preschool educational organization gives older preschool children the opportunity to understand the acquired knowledge and use it in the course of their practical activities. Children can gain the practical skills they need for their future lives in the modern world. Game situations used during training with children help to determine the capabilities and characteristics of the child. Children learn to observe the interrelationship of events, think logically and, thanks to this, create personal and unusual things. An integrated approach helps to develop their interest and involve them in the learning process.

Introduction of STEAM technologies for environmental education of preschool children in a preschool educational institution can be used in a certain way. To begin with, we need a thematic-spatial environment, thanks to which it will be possible to organize experiments and experiments with children, to organize STEAM laboratories and LEGO construction centers.

Second, STEAM allows children to combine different types of activities - and combines all areas - science, technology, engineering, art and mathematics, and thus allows them to show the results of their activities.

Thirdly, a special place is given to the teacher of the preschool educational organization in this process. Only the teacher's creative activity allows to achieve high results through practical research activities.

Pedagogical conditions of using STEAM technologies in environmental education of older preschool children.

Preschool educational organization should have the following pedagogical conditions for environmental education of older preschool children through STEAM technologies:

In the context of improving the preschool education system, the question arises of bringing this level of education to a new, higher quality level. First of all, innovations are needed, one of which is the use of STEAM technologies in the process of teaching and educating preschool children.

With the educational reform, STEAM technology was introduced in the presidential schools in Uzbekistan. Introduction of STEAM teaching technology to pre-school education organizations, which is the first link of the educational system in the country, accelerates and facilitates the early development of children who are interested in and seek new knowledge in pre-school. But if a child struggles to learn in his program, we need to be patient without forcing them, and instead of waiting until they learn, we need to allow them to learn. We can use most of the available equipment as a toy to develop a child's creativity and engineering thinking. We can make some of the types of STEAM games for children with our own hands.

As a result of mastering this education, the child accumulates the experience of a positive attitude towards the world, the surrounding environment and himself, and gains self-respect. A child in pre-school education actively interacts with peers and adults. He conducts a conversation, takes into account the interests and feelings of others, sympathizes with failures and has the ability to be happy with the success of others. In conclusion, it can be said that the beauty of the monotype lies in its elegance and simplicity. The monotype drawing technique always captures an element that has not been drawn in advance and is subject to change. No drawing is the same and the outcome is never known. Children are very fond of this monotype. After all, there is no need to study or try, the requirements are minimal, the results are guaranteed and the pleasure is guaranteed.

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G'aynazarov B.D.
katta o'qituvchisi
Andijon qishloq xo'jaligi va agrotexnologiyalar instituti
O'zbek tili pedagogika va jismoniy madaniyat kafedrası

TALABALARDA SOG'LOM TURMUSH TARZIGA OID KOMPETENSIYALARINI RIVOJLANTIRISHNING TARIXIY- IJTIMOIY PEDAGOGIK ASPEKTLARI

Annotatsiya. Doimo sog'lom yashash va uzoq umr ko'rishga insoniyat azal-azaldan intilib kelgan. Shu nuqtai nazardan oladigan bo'lsak har qanday jamiyatning oldida turgan asosiy vazifa insoniyatning ana shu intilishlarini ro'yobga chiqarishdan, ya'ni kishilar sog'liq va uzoq umr ko'rishlari uchun sharoit yaratishdan iborat. Hamma davrlarda ham sog'lom turmush tarzi sog'liqni saqlashning asosiy omillaridan, talablaridan hisoblanib kelgan. Shuningdek, Har qanday jamiyat taraqqiyotining zamonaviy bosqichida yosh avlodni har tomonlama barkamol etib tarbiyalash eng asosiy masalalardan biri sanaladi.

Kalit so'zlar. Milliy boylik, milliy qadriyat, ta'lim, sog'lom turmush tarzi, sog'liq, sog'lom, insoniyat, ma'naviy va jismoniy sifatlar.

Gaynazarov B.D.
senior lecturer
Department of Pedagogy of Uzbek Language and Physical Culture
Andijan Institute of Agriculture and Agricultural Technologies

HISTORICAL AND SOCIAL EDITORIAL ANNOTATIONS OF THE DEVELOPMENT OF HEALTHY LIFESTYLE COMPETENCIES IN STUDENTS

Annotation. Since time immemorial, humanity has always strived to live healthy and live a long life. From this point of view, the main task facing any society is the realization of these aspirations of humanity, that is, the creation of conditions for people to live a healthy and long life. At all times, a healthy lifestyle has been considered one of the main factors and requirements of health care. Also, in the modern era of development of any society, the comprehensive education of the younger generation is one of the most important issues.

Keywords. National wealth, national value, education, healthy lifestyle, health, health, humanity, spiritual and physical qualities.

O'zining salomatligi haqida shaxsan g'amxo'rlik qilish sog'lom turmush tarzini ga oid kompetensiyalariniyoshlikdan oila va ta'limning barcha bosqichlarida jismoniy tarbiya va sportning ko'magida singdirib borish kerak.

Insonlar endilikda faqatgina soʻzda emas, balki amalda salomatligining qadriga yetib, uni milliy boʻylik, milliy qadriyat sifatida qarashga oʻtishlari lozim boʻladi.

Qadimgi faylasuf olimlar – Platon, Aristotel va boshqalarning asarlarida tarbiya taʼlim tizimida hamda insonlar solomatligi moʻtadilligini taʼminlashda jismoniy tarbiyaga yuksak baho berilgan.

Platon (miloddan avvalgi 427-347 y.y.) Afina zodagonlari vakili, faylasuf-idealist, insonning maʼnaviy va jismoniy sifatleri haqidagi nazariyaning asoschisidir. U Sparta tizimiga moyillik bildirib, harbiy-jismoniy tarbiyani aqliy tarbiya va taʼlim bilan qoʻshib olib borishni koʻzda tutdi. Platon oʻzining asarida shunday degan: «Yaxshi gimnastika oddiy boʻladi, lekin eng avvalo, harbiy gimnastika boʻlishi lozim».

Aristotel (miloddan avvalgi 384-322 y.y.). Yirik olim va faylasuf, Platonning talabasi va Aleksandr Makedonskiyning ustoz boʻlgan. Aristotel shakl va mazmun birligi haqidagi gʻoyani ilgari surgan. Shu bilan birga borliqning rivojlanishini isbotlagan. Insonning ruhi va tanasi ajralmas holda bogʻliq ekanligini tushuntirib bergan. Aristotel oʻgʻil bolalarni jismoniy jihatdan mustahkam qilib tarbiyalash tarafdori boʻlgan. U Platondan farqli oʻlaroq tarbiyada koʻproq taʼlim-tarbiyaga oʻrin berishni, gimnastika mashqlari hajmini kamaytirishni tavsiya etgan. Chunki gimnastikada koʻproq harbiy jismoniy tarbiya va taʼlim koʻzda tutilgan va u bolalar uchun juda murakkab jarayon, deb hisoblagan. Demokrit (miloddan avvalgi 460-370 y.y.) jismoniy mashqlar insonning shakllanishida muhim oʻrin tutadi, yaʼni tabiiy holatni rivojlantirishda ustunroqdir, deb taʼlim bergan. Sokrat (miloddan avvalgi 469-399 y.y.) aytishicha, mustahkam sogʻliq koʻpgina illatlardan saqlashga kafolatdir. Qadimgi grek shifokori Gippokrat (miloddan avvalgi 460-375 y.y.) taʼbiri va taʼlimi boʻyicha, jismoniy mashqlar bilan shugʻullanish turli xil kasalliklarni oldini olish va davolashda muhim ahamiyatga egadir.

Maʼlumki, hozirgi kunda respublikamizda aholi turmush farovonligini oshirish, sogʻligʻni mustahkamlash, jismoniy tarbiya va sportni aholi oʻrtasida ommalashtirish, yosh avlodni aqlan sogʻlom va jismonan barkamol qilib tarbiyalash boʻyicha katta ishlar amalga oshirilmoqda. Bugungi kundagi oʻtroq faoliyat turlarining tobora rivojlanib borishi, shaxsiy transportdan foydalanish koofitsentining ortishi insonlarda jismoniy faolligini pasayishiga olib kelmoqda. Buning natijasida yurak-qon tomir, ovqat xazm qilish tizimi buzilishi, ortiqcha vazn paydo boʻlishi kabi kasalliklarni yuzga kelishiga olib kelmoqda.

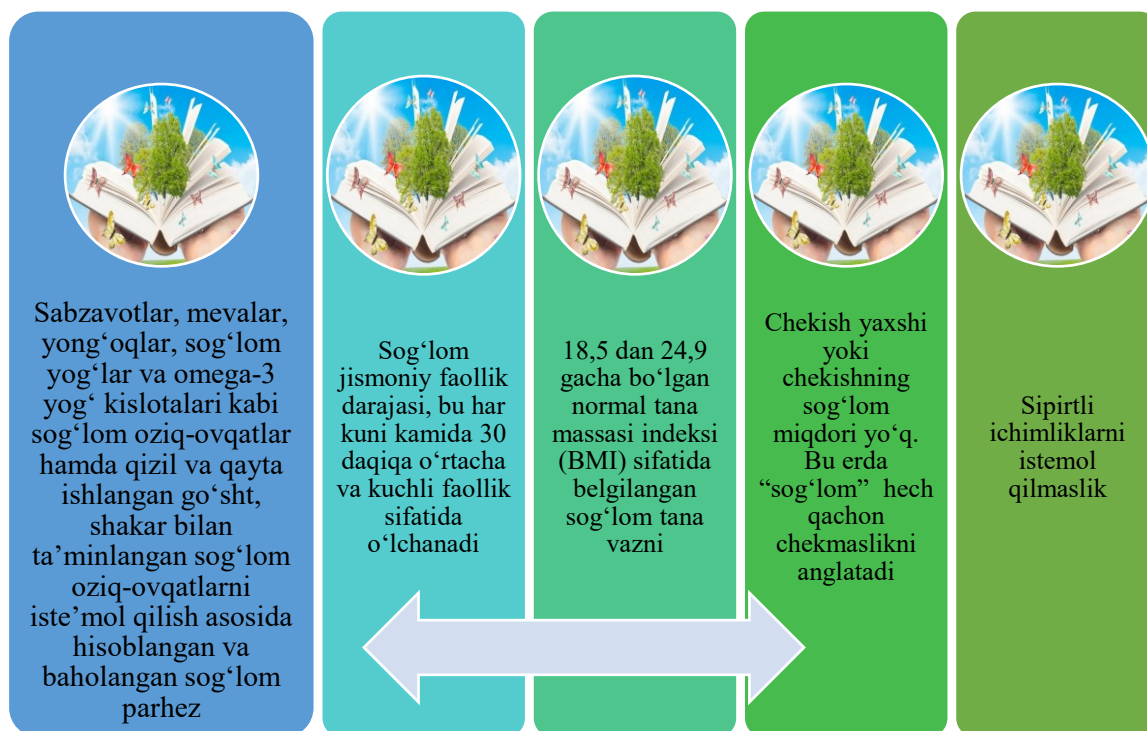
Tabiiyki, bu omillar Respublika aholisining qariyb 40 foizini tashkil etuvchi yoshlar salomatligiga ham oʻz taʼsirini koʻrsatmay qolmaydi.

Bunda sogʻlom turmush tarzini shakllantirish masalasi alohida ahamiyat kasb yetadi. Maʼlumki, barcha davlatlarning taʼlim siyosatining muhim yoʻnalishlaridan biri bu taʼlim oluvchilarning sogʻlom turmush tarzini olib borishi, jismoniy tarbiya va sport bilan muntazam shugʻullanishi, buning uchun talab etiladigan sport infratuzilmasidan foydalanishi uchun sharoit yaratishdir. Jismoniy tarbiya va sport inson salomatligini saqlash, mustahkamlashga, jismoniy

yuksalishga va sogʻlom turmush tarzini shakllantirishga hissa qoʻshishi shubhasizdir. Faol sport bilan shugʻullanish natijasida ortirilgan qobiliyatlar va qadriyat yoʻnalishlari sogʻlom turmush tarziga barqaror ehtiyojni shakllantiradigan, shaxsning oʻzini oʻzi boshqarishning motivatsiyalangan, individual jarayoniga aylanadi.

Sogʻlom turmush tarziga boʻlgan ehtiyojni shakllantirish muammosi yechimi talabalarning sport oʻyinlari, turizmning faol turlari bilan shugʻullanishga qaratilgan shaxsiy motivatsiyasiga, oliy taʼlim muassasasining taʼlim maydonida ushbu jarayonni pedagogik qoʻllab-quvvatlashga bogʻliq. Shu munosabat bilan talabalarining sogʻlom turmush tarzi ga oid kompetensiyalarini rivojlantirish muammosini oʻrganish katta ahamiyatga ega xisoblanadi.

Garvartlik Monique Tello «Sogʻlom turmush tarzi: uzoq umr koʻrishning 5 ta kaliti» nomli maqolasida beshta tanlangan sogʻlom odatlar majmuasidan doimiy foydalanish tavsiya etiladi, chunki koʻplab tadqiqotlar ularning inson salomatligiga foydali ekanligini, erta oʻlim xavfini kamayishiga taʼsir koʻrsatishini koʻrsatdi. Bu sogʻlom odatlar quydagilar(1-rasm):



1-rasm. «Sogʻlom turmush tarzi: uzoq umr koʻrishning 5 ta kaliti (Garvartlik Monique Tello)

Shunday qilib, sogʻliqni saqlash va mustahkamlash muammolari, talabalarining sogʻlom turmush tarziga boʻlgan ehtiyojlarini shakllantirish, harakat faolligini yaxshilash va uzoq umr koʻrishni toʻlaqonli uzaytirisholiy taʼlim muassasalarida oʻqish vaqtida ham tugallangandan keyin ham dolzarbligicha qolaveradi. Har qanday davrda ham sogʻliq yeng yuqori qadriyat, faollik, ijodiy hayot asosi, insonning baxt-saodati, quvonchi va farovonligi hisoblangan.

Zamonaviy jamiyatda sogʻlom turmush tarzi omon qolish shartiga aylanadi. Avvalo, inson oʻzining salomatligi uchun oʻzi javobgardir. Shu sababli, oliy taʼlim muassasalari talabalarining sogʻlom turmush tarzi ga oid kompetensiyalarini rivojlantirish, uni targʻib qilish zamonaviy jamiyatning muhim vazifalaridan biri hisoblanadi. Muammoning dolzarbligi shundan kelib chiqadiki, olimlar talabalarni sogʻlom turmush tarzini saqlash uchun motivatsiya yetishmasligini, oliy taʼlim muassasasi oʻquv jarayoniga talabalar sogʻligʻini saqlash va mustahkamlashga, ularning sogʻlom turmush tarziga boʻlgan ehtiyojlarini qondirishga qaratilgan zamonaviy sogʻliqni saqlash texnologiyalarini yetarli darajada qoʻllamasliklari taʼkidladilar. Biroq, muammoning dolzarbligi jamiyatimizning ijtimoiy-iqtisodiy rivojlanishi va ilmiy-texnik taraqqiyotini sekinlashtirishi va hatto toʻxtatishi mumkin boʻlgan demografik inqiroz tufayli yuzaga keladi.

Inqiroz holatining sabablari orasida ijtimoiy-iqtisodiy va ekologik inqirozlar, taʼlim tizimini tashkil etish va sogʻliqni saqlash strategiyasidagi kamchiliklar mavjud boʻlib, bu sezilarli psixo-emotsional yuklama boʻlib va odamlarning harkat faolligini yetarli darajada emasligi keltirib chiqaradi. Bundan tashqari, oliy taʼlim muassasalari talabalar salomatligi darajasining tez pasayishiga olib keladigan salbiy tendensiyalar sogʻliqni saqlash madaniyatining yetishmasli va inson tomonidan sogʻlom turmush tarzi normalari va qoidalariga rioya qilinmasligini aks ettiradi.

Xulosa qilib aytadigan boʻlsak, mazkur maqola yuzasidan mamlakatimiz va xorij adabiyotlari manbaalarida yoritilgan ilmiy tadqiqotlar natijalarini pedagogik tahlil qilish, ilgʻor tajribalarni oʻrganish, pedagogik kuzatuv, soʻrovnoma, joriy tadqiqotlar va pedagogik tajriba natijalarining qiyosiy tahlili asosida Talabalarda sogʻlom turmush tarziga oid kompetensiyalarni rivojlantirishning didaktik imkoniyatlarini oʻrganish boʻyicha ushbu yoʻnalishda ilmiy tadqiqotlarni olib borish zarurligini koʻrsatadi.

Foydalanilgan adabiyotlar roʻyxati:

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*G'odalov M.R.
JDPU Geografiya va iqtisodiy bilimlar
asoslari kafedrasini mudiri, dotsent
Ravshanov R.S.
GulDU Ekologiya va geografiya kafedrasini o'qituvchisi*

JIZZAX VILOYATI EKOLOGIK HOLATI VA UNGA TA'SIR ETUVCHI OMILLAR

Annatsiya. Maqolada Jizzax viloyati ekologik sharoiti va unga ta'sir etuvchi omillar, ularning oqibatlarini yaxshilash masalalari muhokama qilingan.

Kalit so'zlar. ekologiya, suv, sel, surilma, o'simlik, hayvon, tabiat muhofazasi, resurs, cho'l, chala-cho'l.

*Godalov M.R.
associate professor
Head of the Department of Basics
of Geography and Economic Knowledge
JDPU
Ravshanov R.S.
teacher
Department of Ecology and Geography
GulSU*

ECOLOGICAL CONDITION OF JIZZAK REGION AND FACTORS AFFECTING IT

Annotation. The article discusses the issues of improving the ecological conditions of the Jizzakh region and the factors affecting it, as well as their consequences.

Key words. ecology, water, floods, landslides, plants, animals, nature protection, resources, desert, semi-desert.

Kirish qismi: Yurtimizda boshqa sohalar qatori ekologik barqarorlikni ta'minlash, aholining qulay tabiiy muhitga ega bo'lishi uchun zarur shart-sharoitlar yaratish, tabiiy resurslardan oqilona va samarali foydalanish, yuzaga kelayotgan ekologik muammolarning oldini olish va ularning salbiy oqibatlarini bartaraf etish masalalariga ham jiddiy e'tibor qaratib kelinmoqda.

Ekologiya va tabiatni muhofaza qilish bo'yicha chiqarilgan barcha Oliy Majlis qonunlari, Prezident qarorlari va Vazirlar Mahkamasining qarorlari, ko'rsatmalari va boshqa me'yoriy hujjatlari o'z vaqtida bajarilishi va ularga amal qilinishi lozim. Ushbu qonun va qarorlarni bilish va unga rioya etish bu qonunlarga hurmat tabiatga ham hurmatni bildiradi.

Asosiy qismi: Jizzax viloyatining atrof-muhitini muhofaza qilish va tabiiy resurslardan oqilona foydalanish hamda aholining bu boradagi madaniyatini yuksaltirish bo'yicha harakatlar amalga oshirilmoqda. Shu asosda ekologiya hamda atrof-muhitni muhofaza qilish borasidagi sohaga axborot-kommunikatsiya texnologiyalarini keng joriy etish, jamoatchilik ekologik nazorati tizimini rivojlantirish, jamoatchi inspektorlarni o'qitish va ular malakasini oshirish, chiqindilar bilan bog'liq muammolarni hal etish bo'yicha bir qator samarali ishlar olib borilmoqda. Hozirgi paytda ularning sohaga oid bilim va malakasini oshirish choralari ko'rilmoqda.

Jizzax viloyati ekologik xavfsizlikni ta'minlash shuningdek, sanoat, avtotransport chiqindilari eng kam xavfsiz ko'rsatkichlarga qadar kamaygan bo'lishi, ikkilamchi resurslar to'liq qayta ishlanib ulardan foydali elementlar ajratib olinishi zarur. Eng muhimi isrofgarchilikka chek qo'yilib, tabiatdan ehtiyojga yarasha boyliklarni ajratib olib, chiqindilarni chiqarmaslik tamoyilida ish tutishga o'tishdan iborat. Tabiat resurslarini qayta tiklash, kamayib borayotganlaridan ehtiyotkorlik bilan foydalanish, bu borada muqobil variantlar, yani o'rnini bosadigan boshqa resurslardan foydanishga o'tish kabi tamoyillarni barcha joylarda, hamma ishlab chiqarish korxonalarida qo'llashga o'tish tabiatni asrash, uni e'zozlash o'z navbatida ekologik xavfsizlikni ta'minlashni kafolatlaydi.

So'nggi yillarga Jizzax viloyatini janub tomonidan o'rab turgan tog'lardagi o'rmonlarning siyraklashib, ayrim noyob o'simlik va hayvonot dunyosi vakillari yo'qolib borayotganligi sel, surilma hodisalarining tez-tez ro'y berishi oqibatida favqulodda holatlarning ko'payishiga va ekologik muammolarni vujudga keltirmoqda.

Tabiiy boylik hisoblangan suv, havo, tuproq, o'simlik, hayvonot olami, foydali qazilmalar insonning yashashi va ishlab chiqarish faoliyati uchun asosiy manba bo'lib xizmat qiladi. Jizzax viloyati respublika miqyosida tabiiy resurslarga nisbatan boy bo'lgan mintaqalardan hisoblanadi. Mavjud tabiiy resurslardan oqilona foydalanish suv va havoni toza saqlash, tuproq eroziyasining oldini olish, o'simlik va hayvonot olamini tabiiy holicha saqlab qolib, keyingi avlodlarga yetkazish viloyat aholisining eng muhim vazifalaridan biri hisoblanadi.

Viloyatdagi eng muhim va tanqis bo'lgan tabiiy resurslardan biri ichimlik suvi hisoblanadi. Suv - juda qimmatbaho xususiyatlarga ega mineral boylik bo'lib, hozirgi vaqtda suv qimmatbaho sanoat xomashyosiga aylanib qoldi. Viloyat hududi kontinental iqlimi cho'l, chala cho'l, tog' oldi dasht, qisman tog'larda joylashganligi sababli suv juda qadimdan jiddiy muammo bo'lib kelgan. Mutaxassislar tomonidan viloyat hududida, asosan neogen va to'rtlamchi davr yotqiziqlarida joylashgan yer osti ichimlik suvi havzalari aniqlangan va u viloyat aholisini toza ichimlik suvi bilan ta'minlash imkonini bermoqda. Yer osti ichimlik suvi havzalari asosan tog'li hududlarda joylashganligi bois, viloyatning cho'l zonasidagi aholini ichimlik suvi bilan ta'minlash ancha qiyin va dolzarb masala

hisoblanadi. Shu sababdan, mavjud ichimlik suvlardan tejab-tergab, oqilona va samarali foydalanish uchun, sanoat korxonalarida foydalanilayotgan suvlarni zamonaviy texnologiyalar yordamida tozalash, suvdan foydalanishning aylanma suv ta'minotiga o'tishi, qishloq xo'jaligida suv sarfini me'yor darajasiga keltirish uchun sug'orish tarmoqlarini doimiy nazorat qilib, qishloq xo'jalik ekinlarini sug'orishda yangi texnologiyalardan foydalanish, kollektor va drenaj suvlari tarkibida suvni ifloslaydigan har xil erigan tuzlar, paxta va boshqa ekinlarga sepilgan turli xil zaharli moddalar eritmasi mavjud, mana shu zovur-drenaj suvlarini alohida joyga to'plab, ularni toza suv bilan aralashib ketishiga chek qo'yish, shahar va qishloq aholi punktlarini toza ichimlik suvi bilan bir maromda ta'minlash uchun, ichimlik suvidan sug'orish uchun foydalanish, avtotransport vositalarini yuvish, suv qurilmalarining nosozligi tufayli ichimlik suvini isrof qilish kabi ishlarni qat'iy taqiqlashchora tadbirlarni amalga oshirish zarur.

Aydar-Arnasoy ko'llar tizimi, falokatli suv ko'p bo'lgan 1969-yilda Chordara suv omboridan 21 km² suvni tashlash natijasida shakllangan, vaqt o'tishi bilan Arnasoy, Aydarko'l va Tuzkonning umumiy suv hajmi 22 km² va maydoni 2500 km² bo'lgan Aydar-Arnasoy ko'llar tizimini tashkil qildi.

Aydar-Arnasoy ko'llar tizimi ko'plab qush va hayvonlar uyalaydigan joyga aylandi, ovchilik va baliqchilik rivojlandi. 1993-yildan boshlab Qirg'iziston Respublikasi To'xtagul suv ombori sug'orish tartibidan energiya tartibiga o'tdi. Natijada Aydar-Arnasoy ko'llar tizimiga 1994-yil 9km³ dan ortiq Sirdaryo suvi tashlandi. Oqibatda 120 ming gektardagi yaylovlarni, quduq, dam olish mintaqalari hamda baliq ovlanadigan joylarni suv bosdi. 2005-yilda Aydar-Arnasoy ko'llar tizimi eng yuqori hajmga 44,19 km³ ga yetdi. 1993-2006-yillar oralig'ida Arnasoy pastligiga 38,635 km³ chuchuk Sirdaryo suvi tashlandi. 2007-yilda Arnasoyga umumiy suv tashlanishi qariyb 200 mln m³ ni tashkil etdi. Hozirda suvning minerallashuvi har litrda 8g atrofida. Agar ko'llar tizimiga suv tashlanishi to'xtatilsa, suv sathi 0,4-0,6 m ga pasayadi. Yiliga suv havzasi sathidan 1250 mm suv bug'lanishi suvning minerallashuvini keyinchalik yiliga o'rtacha taxminan har litrda 300 mm ga yetishiga sabab bo'lishi mumkin. Ko'lga yiliga qo'shilayotgan kollertor-zovur suvlari miqdori 1,8-2,4 km³. Agar havzaga 4 km³ dan ortiq suv tashlansa, suv sathi kamida 0,5 (mutlaq balandlik 250 m gacha) ko'tarilishiga va 200 km² maydonni suv bosishiga olib kelishi mumkin. Bu omillar Aydar-Arnasoy ko'llar tizimida ekologik tang vaziyatni vujudga keltiradi, natijada mintaqaning katta hududlari ekotizimlariga jiddiy salbiy ta'sir ko'rsatadi. Hayvonlar, ayniqsa qushlar migratsiyasi izdan chiqadi.

Xulosa qismi: Viloyat hududidagi barcha tabiiy resurslarni himoya qilish, ulardan unumli va oqilona foydalanish uchun hozirgi davrda quyidagi vazifalarni bajarish lozim:

- Viloyat hududida mavjud bo'lgan barcha korxonalar va tashkilotlar ishlab chiqarish texnologiyalarini hozirgi ekologik talab darajasida takomillashtirishi zarur;

- Sanoat, maishiy va uy-ro'zg'or chiqindilarini o'z vaqtida olib chiqish, qayta ishlash va ularni sanitariya va gigiyena talablari asosida bartaraf etish lozim;
- Kelajakda qurilayotgan har qanday ishlab chiqarish korxonalarini hamda aholi turar joylarini ekologik nuqtai nazardan to'g'ri joylashtirish zarur;
- Aholining ekologik madaniyatini oshirish maqsadida, mavjud ekologik ta'lim va tarbiya tizimidan to'g'ri va oqilona foydalanish lozim;
- Qadimiy an'ana va urf-odatlardan kelib chiqqan holda, kelajak avlodni atrof-muhitni asrab-avaylaydigan, tabiatni e'zozlaydigan qilib tarbiyalash.

Umuman olganda, viloyat hududidagi tabiiy resurslardan oqilona foydalanish va tabiiy landshaftlarni muhofaza qilish, tabiiy muvozanatini saqlash, har qanday salbiy o'zgarishlarga yo'l qo'ymaslik, tabiatning xushmanzara va diqqatga sazovor joylarini asrab-avaylash, tabiiy resurslarni saqlash va ko'paytirish maqsadida viloyat hududida qo'riqxonalar, buyurtmalar va milliy tabiiy bog'lar tashkil etilsa maqsadga muvofiq bo'lar edi.

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Gofurova U.X.
student
Tashkent State University of Economics
Gofurova S.S.
docent
Jizzakh Polytechnic Institute
Scientific director: Sieradzki R.J., PhD
Cracow University of Economics

THE NEED FOR CORPORATE TRANSPARENCY AND INFORMATION DISCLOSURE

Annotation. In this article, the importance of the principle of transparency and information disclosure in corporate governance, its role in the system, and the reasons for the globalization of these principles are analyzed. At the same time, in the process of analysis, it is written about ensuring the openness of information in corporate governance and the factors required in this process. Including the recommendations on establishing transparency and information openness in corporate governance system, as well as its positive effects.

Key words: Corporate governance, transparency, information disclosure, corporate system, data openness, implementation, effect.

Introduction: Information disclosure and transparency in corporate governance are fundamental principles that play a vital role in ensuring accountability, integrity, and trust within organizations. These concepts emphasize the importance of companies being open and forthcoming about their financial performance, operations, decision-making processes, and overall governance practices.

Information disclosure involves companies providing accurate and timely information to stakeholders, such as shareholders, regulators, employees, customers, and the public. This information typically includes financial statements, executive compensation details, board composition, major business transactions, and other relevant data that can impact stakeholders' decisions and perceptions.

Transparency, on the other hand, refers to the accessibility and clarity of the disclosed information. Transparent corporate governance practices ensure that stakeholders can easily access, understand, and evaluate the information provided by companies. This helps to build trust, enhance communication, and foster accountability between companies and their stakeholders.

Analysis of literature on the topic: «The Transparency Edge» by Barbara Pagano and Elizabeth Pagano is a comprehensive guide that underscores the critical role of transparency and credibility in business success. The authors stress

the impact of honesty and openness on building trust with stakeholders, including customers and employees. Through practical insights and strategies, the book demonstrates how transparency can set you apart from competitors and enhance your reputation. By emphasizing the benefits of transparent practices, the authors show how businesses can leverage credibility to strengthen relationships and achieve long-term success in today's competitive marketplace. The book offers valuable advice on incorporating transparency into business operations for sustainable growth. [1] «The Transparency Fix: Secrets, Leaks, and Uncontrollable Government Information» by Mark Fenster delves into the complex world of government transparency, secrets, and leaks. The book explores how governments grapple with the challenges of controlling information flow in an era of rapid technological advancements and increasing demands for accountability. Fenster examines the tension between the government's need for secrecy to protect national security and the public's right to access information to ensure transparency and accountability. Through a mix of legal analysis, historical examples, and case studies, the author sheds light on the evolving landscape of government transparency and its implications for democracy. Ultimately, «The Transparency Fix» offers a thought-provoking exploration of the delicate balance between secrecy and openness in governance. [2] «Information Disclosure Practices and Corporate Transparency in Uzbek Companies» by Nargiza Usmanova provides a comprehensive analysis of the information disclosure practices and levels of corporate transparency in Uzbekistan. The book examines how companies in Uzbekistan navigate the balance between disclosing information to stakeholders and maintaining confidentiality. Usmanova explores the regulatory framework, cultural influences, and economic factors that shape information disclosure practices in the country. Through empirical research and case studies, the author sheds light on the challenges and opportunities for enhancing corporate transparency in Uzbek companies. This book serves as a valuable resource for academics, policymakers, and business practitioners interested in corporate governance and transparency in Uzbekistan. «Information Disclosure Practices and Corporate Transparency in Uzbek Companies» by Nargiza Usmanova provides a comprehensive analysis of the information disclosure practices and levels of corporate transparency in Uzbekistan. The book examines how companies in Uzbekistan navigate the balance between disclosing information to stakeholders and maintaining confidentiality. Usmanova explores the regulatory framework, cultural influences, and economic factors that shape information disclosure practices in the country. Through empirical research and case studies, the author sheds light on the challenges and opportunities for enhancing corporate transparency in Uzbek companies. This book serves as a valuable resource for academics, policymakers, and business practitioners interested in corporate governance and transparency in Uzbekistan. [3]

Research methods: Logical and structural analysis, grouping, economic-statistical analysis, mutual and comparative comparison methods were effectively used in the implementation of the research objectives.

Analysis: Corporate transparency refers to the practice of companies being open, honest, and forthcoming in their communication with stakeholders, including investors, employees, customers, and the public. It involves providing accurate and timely information about a company's operations, financial performance, governance practices, and other relevant aspects. Information disclosure is a key component of corporate transparency, as it involves sharing data, reports, and other details that help stakeholders understand how the company operates and makes decisions. For thus, corporate transparency and information disclosure is becoming more global day by day. One major reason is advancements in technology, particularly in communication and transportation, which have made it easier for people, goods, and information to move across borders. Additionally, trade liberalization policies have reduced barriers to international trade, making it more cost-effective for companies to do business in multiple countries. The growth of multinational corporations has also played a significant role in driving globalization, as these companies operate in multiple countries and have supply chains that span the globe. After these causes, information disclosure is also crucial in the management system for several reasons. Firstly, it helps build trust with stakeholders by demonstrating transparency and accountability. When companies are open and honest about their operations and performance, stakeholders are more likely to trust them. Additionally, information disclosure enables informed decision-making by providing stakeholders with the data they need to assess risks and opportunities. It also enhances accountability by allowing stakeholders to hold companies responsible for their actions.

Due to the reasons mentioned above, there is a demand to implement transparency and information openness in the corporate management system. Implementing effective information disclosure practices requires companies to establish clear policies and procedures for reporting information. This includes defining what information needs to be disclosed, how it will be collected and verified, and how it will be communicated to stakeholders. Companies also need to ensure compliance with relevant laws and regulations governing information disclosure. Fostering a culture of transparency within the organization is also important, as employees need to understand the importance of sharing information openly. Finally, companies can use technology to facilitate the dissemination of information, such as by creating online portals or dashboards where stakeholders can access relevant data.

The significance of corporate transparency and information disclosure in shaping effective corporate governance cannot be understated. The positive effects of transparency on businesses and the corporate governance system are manifold and far-reaching. Firstly, transparency plays a pivotal role in boosting

investor confidence by providing stakeholders with the necessary information to make well-informed investment decisions. When companies are forthcoming about their operations and financial performance, investors are more inclined to trust them, leading to a stronger investor-company relationship.

Moreover, transparency serves as a powerful deterrent against fraud and misconduct within organizations. By making it difficult for companies to conceal unethical practices, transparency acts as a safeguard against malfeasance, thereby promoting integrity and ethical conduct. Additionally, transparency enhances a company's reputation and brand value by showcasing its commitment to honesty, accountability, and ethical behavior. A transparent organization is perceived as trustworthy and reliable, which can significantly bolster its standing in the eyes of stakeholders.

Furthermore, fostering a culture of accountability and ethical behavior is another crucial benefit of transparency within organizations. When employees know that their actions are being monitored and that transparency is valued, they are more likely to adhere to ethical guidelines and uphold high standards of conduct. This, in turn, creates a positive work environment built on trust, integrity, and responsibility.

To introduce information openness to corporate governance effectively, several proposals can be considered. Implementing regular reporting requirements, establishing independent oversight mechanisms, engaging with stakeholders, and learning from best practices in other industries are key strategies to enhance transparency and information disclosure within organizations. By adopting these proposals, companies can strengthen their transparency efforts, improve stakeholder relationships, and elevate their corporate governance practices.

In essence, corporate transparency and information disclosure are indispensable pillars of robust corporate governance. By embracing transparency, companies can cultivate trust, enhance accountability, and foster a culture of integrity and ethical behavior. Implementing effective information disclosure practices requires a comprehensive approach encompassing clear policies, regulatory compliance, a transparent organizational culture, and leveraging technology for communication. Ultimately, transparency not only benefits businesses by bolstering investor confidence, mitigating fraud risks, enhancing reputation, and promoting ethical conduct but also contributes to a more sustainable and responsible corporate governance framework. Embracing transparency is not just a business imperative but a moral obligation that paves the way for long-term success and stakeholder trust in today's dynamic business landscape.

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*Hasanova S.K.
Termiz davlat pedagogika instituti talabasi*

ONA TILI VA O‘QISH DARSLARIDA PIRLS HIKOYALARIDAN FOYDALANISH ORQALI XALQARO BAHOLASH DASTURIGA TAYYORGARLIK KO‘RISHNING METODIK SHARTLARI

Annotatsiya: ushbu maqolani o‘qish davomida ona tili va o‘qish darslarida PIRLS xalqaro baholash dasturiga tayyorlanish va hikoyalarni qo‘llash orqali tarbiyaviy jarayonlarni tashkil etish metodikasi haqida bilib olasiz.

Kalit so‘zlar: PIRLS topshiriqlari, savollar, boshlang‘ich sinf o‘quvchilari, natija, tafakkur, mantiqiy fikrlash.

*Hasanova S.K.
student
Termiz State Pedagogical Institute*

METHODOLOGICAL CONDITIONS FOR PREPARING FOR THE INTERNATIONAL ASSESSMENT PROGRAM BY USING PEARLS' STORIES IN MOTHER LANGUAGE AND READING LESSONS

Abstract. While reading this article, you will learn about the methodology of preparing for the PIRLS international assessment program and organizing educational processes using stories in the mother tongue and reading classes.

Keywords: PIRLS tasks, questions, elementary students, result, thinking, logical thinking.

Xalqaro miqyosda tashkil etilgan ushbu loyiha, bir xil yoshdagi, bir xil tal'im-tarbiya olaytgan yoshlarni o'qib tushunish jarayonlarini tekshirish, mamlakatlar orasida eng namunali ta'lim tizimini aniqlash, namunali deb topilgan mamlakatlarni yanada qo'llab-quvvatlash, past natija ko'rsatgan mamlakatlarga ilmiy yordam berish nazarga olingan.

Rivojlangan mamlakatlar yoshlar ta'limining jamiyat taraqqiyoti va inson rivojlanishidagi o'rnini muhim deb hisoblaydi. Shu bois ham ular ta'lim sifatiga alohida e'tibor qaratadi. Rivojlanib borayotgan ta'lim tizimimizda amalga oshirilayotgan islohotlar natijasida ulkan iqtisodiy o'sish ko'rsatkichlariga erishilayotganligi barcha sohalarda malakali kadrlar va yetuk mutaxasislarga bo'lgan talabni yanada oshirmoqda. Bu o'z-o'zidan o'quvchilarimizning darslarga qiziqish xususiyatini oshirish va o'qituvchilarning har tomonlama ta'lim-tarbiyaga e'tiborini kuchaytirishni talab etadi. Ayni davrda yurtimizda ham ta'lim sohasidagi sifat tushunchasi ancha ommalashib ulgurdi. Kelajak yosh avlodning intellektual salohiyatini oshirish, keng dunyoqarashini shakllantirish

nafaqat muayyan bir mamlakat uchun, balki, xalqaro hamjamiyat uchun ham muhim hisoblanadi.

Bilamizki, ta'lim tizimimiz rivojlanishi, takomillashishi natijasida yurtimizga turli xil metodlar, manbalar, texnika va shu qatorda xalqaro baholash dasturlari ham kirib keldi. Natijada ta'lim tizimimizda yoshlar uchun keng imkoniyatlar yaratildi.

Boshlang'ich ta'lim yo'nalishi uchun PIRLS xalqaro baholash dasturi ahamiytlidir. Negaki, 4-sinf o'quvchilarimiz dunyo miqyosida har besh yilda imtihondan o'tishadi. Ular ko'rsatgan natijalar esa O'zbekistonning reytingini belgilaydi. Ushbu mas'uliyatli vazifaga tayyorgarlik jarayonida o'qituvchi sinf rahbarlaridan katta mashaqqat talab etiladi. Ular sinf o'quvchilarini tadqiqotga tayyorlashni rejalashtirishdan oldin avvalo o'zlari talab doirasidagi talablarga javob berishi, o'z ustilarida tinimsiz ilmiy izlanishlar olib borishi zarur.

PIRLSning maqsad vazifasi shundan iboratki, u o'quvchilarning ma'naviy, mantiqiy dunyoqarashini, shaxsiy fikrga, tahlilga ega bo'lishga chorlaydi. Negaki, zamon talabiga javob beradigan o'quvchi, talaba yoinki mutaxassis o'z MENiga ega bo'lishi zarur. Dunyoda boshqacha ko'z bilan qaray oladigan, o'z orzu-maqsadlarini keraksiz va samarasiz narsalardan ustun qo'ya oladigan, irodali shaxs bo'lishi zarur.

PIRLS xalqaro tadqiqoti boshlang'ich sinf o'quvchilarining o'qib tushunish ko'nikmalarini qay darajada rivojlanganligi haqidagi ma'lumotlarni xalqaro miqyosda taqqoslash imkonini beradigan, o'qish va o'qitishni yaxshilashda ta'lim sohasidagi davlat siyosatiga xizmat qilishi mumkin bo'lgan tahlillarni taqdim etadi. Ko'p imkoniyatlarni rivojlantirishga xizmat qilayotgan bu baholash dasturi O'zbekiston ta'lim tizimida ham ahamiyatli deb topilgan va amalda qo'llash joriy etildi. Shunga binoan, hozirgi vaqtda PIRLS ta'rifiga ko'ra, o'qish savodxonligi jamiyat tomonidan talab qilinadigan va inson tomonidan qadrlanadigan yozma til shakllarini tushunish va ulardan foydalanish, shuningdek, matnlardan turli shakllarda ma'no hosil qila olish qobiliyati hamdir. O'quvchi bu jarayonning faol qatnashuvchisi bo'lib, ma'no yaratadi, matn ustida mushohada yuritadi va samarali o'qish strategiyalarini ongli ravishda tanlab qo'llaydi. Har bir matn turi odatiy shakl va qoidalarga amal qilgan holda o'quvchiga matnni sharhlashga yordam beradi.

PIRLS talablari asosida mustaqil ishlar tashkil etilmoqda, uslubiy-metodik qo'llanmalar, hikoyalar to'plamlari chop ettirilmoqda. Bu jarayon albatta, o'zini oqlashiga ishonaman. Negaki, o'zimiz yaratgan hikoyalar bilan 1-2 sinf o'quvchilarida immunitet hosil qilib, 3-4 sinfda chet el adabiyotlaridan foydalansak samarali bo'ladi. Maqsad-vzaifasini, topshiriqni bajarish tartibi, baholash mezonini anglab tushunib olishgandan so'ng, tadqiqotda tushunish va tahlil qilish jarayonida albatta yuqori natijani egallashadi deb hisoblayman.

2021 – yilda o'quvchilarimiz ushbu xalqaro baholash dasturida ishtirok etishdi. 57 ta davlar orasida tashkillashtirilgan ushbu ilmiy jarayonda Vatanimiz 49 o'rinni egalladi. O'qib tushunish va tahlil qilish jarayonida xatoliklarga yo'l

qo'yilgan. Ushbu jarayon yana takrorlanmasligi uchun mukammal tayyorgarlik jarayoni olib borilmoqda.

Boshlang'ich sinf o'quvchilarining imkoniyatlari muallif tomonidan ishlab chiqilgan uslubiy qo'llanma vositasida tahlil qilindi. Erishilgan natijalardan ma'lum bo'ldiki, PIRLS xalqaro baholash dasturida berilgan topshiriqlarda asosiy obyekt o'quvchi hisoblanadi, ushbu toshiriqlarini bajarish orqali o'quvchilarning kreativ fiklashi, tanqidiy tahlili, hamkorlik qobiliyati va ijtimoiy munosabatlari shakllantiriladi.

PIRLS hikoyalari zamonaviy ta'lim uchun ahamiyatlidir. Hikoyalarning mazmun-mohiyatini xulosalash orqali boshlang'ich sinf o'quvchilari bilan birgalikda tarbiyaviy jarayonni ham tashkillashtirish mumkin. Bu jarayonni amalga oshirish uchun o'qituvchilardan ijodiy fikrlash talab etiladi. PIRLS xalqaro dasturi talablaridan kelib chiqib tayyorlangan topshiriqlardan foydalanilganda, o'quvchilarning qiziqishi, kreativligi, sezilarli darajada faollashdi.

Hozirgi vaqtda bo'lajak mutaxassislariga ya'ni boshlang'ich ta'lim yo'nalishi talabalariga PIRLS asosida mustaqil ta'lim soatlarini ajratish, ular bilan PIRLS ustida amaliy ishlar bajarib, uslubiy qo'llanmalar yaratish nazarda tutilmoqda. Va tez orada ushbu jarayon amaliyotga tadbiiq etiladi degan umiddamiz.

PIRLS talablari asosida hikoyalar to'plami ustida ishladik. 1 yil davomida uni yetarli darajada takomillashtirdik. Hozirgi unda chop etilgan «Kichik yong'oq daraxti» to'plamimiz maktablarga amaliyotda qo'llash uchun topshirilgan. Maktablarga kitobimning taqdimoti o'tkazilishi uchun yuborildim, va natijadan shu ma'lum bo'ladiki, Surxondaryo viloyati chekka hudud tumanlarida PIRLS haqidagi tushunchalar rivojlanmagan va amalda topshiriqqa tayyorgarlik jarayoni ham tashkil etilmagan. Bu holat alabttta, achinarli. Shuning uchun ham PIRLS tadqiqotlarini yanada takomillashtirish va chekka, oz komplimentli maktablarda samarali tashkil etish uchun uslubiy qo'llanmalar ustida ishlamoqdamiz. Shuni ham aytib o'tishim joizki, mustaqil ta'limni qo'llab-quvvatlash va amaliyotga tadbiiq etish zarur.

O'quvchilarni mantiqiy tafakkurini shakllantirish uchun balki ma'lum muddat kechikkandurmiz, ammo yangi darslik 4K modeli, PIRLS asosida yaratilayotgan topshiriqlar to'plamlaridan foydalanib, samarali ilmiy faoliyatni tashkil etishimiz mumkin.

Tadqiqot doirasida asosiy e'tibor tushunishni namoyon qilishdan o'zlashtirilgan ma'lumotlarni qanday qilib yangi loyihalar va vaziyatlarda qo'llay olish qobiliyatlarini namoyon qilishga qaratilmoqda. O'quvchi bu jarayonning faol qatnashuvchisi bo'lib, ma'no yaratadi, matn ustida mushohada yuritadi va samarali o'qish strategiyalarini ongli ravishda tanlab qo'llaydi.

Rivojlangan mamlakatlar yoshlar ta'limining jamiyat taraqqiyoti va inson rivojlanishidagi o'rnini muhim deb hisoblaydi. Shu bois ham ular ta'lim sifatiga alohida e'tibor qaratadi. Rivojlanib borayotgan ta'lim tizimimizda amalga

oshirilayotgan islohotlar natijasida ulkan iqtisodiy o'sish ko'rsatkichlariga erishilayotganligi barcha sohalarda malakali kadrlar va yetuk mutaxassislariga bo'lgan talabni yanada oshirmoqda. Bu o'z-o'zidan o'quvchilarimizning darslarga qiziqish xususiyatini oshirish va o'qituvchilarning har tomonlama ta'lim- tarbiyaga e'tiborini kuchaytirishni talab etadi. Ayni davrda yurtimizda ham ta'lim sohasidagi sifat tushunchasi ancha ommalashib ulgurdi. Kelajak yosh avlodning intellektual salohiyatini oshirish, keng dunyoqarashini shakllantirish nafaqat muayyan bir mamlakat uchun, balki, xalqaro hamjamiyat uchun ham muhim hisoblanadi.

Bugun dunyoda yuz berayotgan to'rtinchi sanoat tamaddunining dvigateli — harakatga keltiruvchi kuchi kreativlikdir. Atrofga boqsangiz, har tomonda inson ijodkorligining beqiyos va hayratlanarli namunalariga duch kelasiz: elektron xizmatlar, virtual reallik, to'rtburchak tarvuzlar, tuproqsiz hosil olish... Bularning barchasi inson tasavvuri, tafakkuri mahsuli. Bugun biz uchun odatiy tuyulgan kitob, musiqa, bino, samolyot, hatto lampalar ham qachonlar orzu va tasavvurda bo'lgan, keyinchalik aql-idrok samarasi o'laroq yaratilgan.

PIRLS xalqaro baholash dasturini ommalashib borayotgan so'zi bilan qo'llash bugungi kunda noo'rin bo'ladi desam, mubolag'a bo'lmaydi. Negaki, tadqiqot doirasida keng ko'lamlı ishlar olib borilmoqda. O'qituvchilar va o'quvchilar dasturga moslashish jarayonida, o'zlari ham tadqiqot ustida amaliy ishlar olib borilmoqda. Yangi darsliklar zamon talabiga binoan, xalqaro baholash dasturining talablariga xos tarzda yaratilmoqda. Ularning metodikasi 4K modeliga asoslangan bo'lib, an'anaviy ta'lim o'qitish tizimidan tubdan farq qiladi.

An'anaviy ta'lim tizimida ilmiy ustunlik o'qituvchi tomonida bo'lgan. Bugungi kunda 4K modeli o'zida mujassamlashtirgan g'oya, maqsad va vazifalariga ham ustoz yetakchilik qilgan. Bugungi zamonaviylashgan va integratsiyalashgan ta'lim tizimida asosiy obyekt o'quvchilarga qaratilmoqda

Boshlang'ich sinf o'quvchilarining imkoniyatlari muallif tomonidan ishlab chiqilgan uslubiy qo'llanma vositasida tahlil qilindi. Erishilgan natijalardan ma'lum bo'ldiki, PIRLS xalqaro baholash dasturida berilgan topshiriqlarda asosiy obyekt o'quvchi hisoblanadi, ushbu toshiriqlarini bajarish orqali o'quvchilarning kreativ fiklashi, tanqidiy tahlili, hamkorlik qobiliyati va ijtimoiy munosabatlari shakllantiriladi.

Mehnat bozorida kreativ fikrlovchi mutaxassislariga talab oshib borayotgan ekan, ta'lim jarayonida o'quvchi-talabalarning noodatiy fikrlash qobiliyatini shakllantirish, rivojlantirish dolzarb vazifadir. Haligacha ta'lim tizimida ko'plab yondashuv va metodlar ijodiy fikrlash emas, talqin va tahlilga, ya'ni berilgan ma'lumotni tushunib, to'g'ri yetkazishga, nari borsa, bir necha axborotni umumiy lashtirib, xulosa chiqara olishga yo'naltirilgan.

Xo'sh, ta'lim oluvchilarni qanday qilib kreativ fikrlashga o'rgatish mumkin? Innovatsiya yaratish uchun tafakkurda qanday o'zgarishlar kechishi lozim?

Shaxsda kreativlik sifatlarini rivojlantirish uchun dastlab bu tushunchaning mazmunini bilish lozim. Kreativlik inglizcha «create»dan olingan bo‘lib, yaratish ma’nosini bildiradi. Kreativlik deganda insonning yangilik yaratish, muammolarni yechishga qaratilgan ijodiy qobiliyati tushuniladi. Uning tagzamidagi originallik, amaliylik, noodatiylik va erkinlik yotadi. Shuningdek, kreativ fikrlash muayyan masala yuzasidan har tomonlama fikrlash, bir nuqtaga turli rakursdan yondashishni anglatadi.

Kreativlik shaxsni rivojlantiruvchi kategoriya sifatida inson tafakkuri, ma’naviyatining ajralmas qismi hisoblanadi, u shaxs ega bo‘lgan bilimlarning ko‘pqirrali ekanligida emas, balki yangi g‘oyalarga intilish, o‘rnatilgan stereotiplarni isloh qilish va o‘zgartirishda, hayotiy muammolarni yechish jarayonida kutilmagan va noodatiy qarorlar chiqarishda namoyon bo‘ladi. Ya’ni, berilgan bilimlarni takrorlash orqali kreativlikka erishib bo‘lmaydi, ijodiy fikrlash jarayonida yangi fikr, yangi g‘oyaning paydo bo‘lishi asosiy shartdir. Masalan, ingliz tilida so‘zlarni yodlab, grammatika qoidalarini «suv qilib ichib yuborgan» bo‘lsangiz ham, insho yozolmasangiz, barchasi bekor. Shuning uchun kreativ fikrlash jarayonida tasavvur muhim rol o‘ynaydi. Albert Eynshteyn «Tasavvur — bilimdan muhim» deganida aynan mana shu jihatni nazarda tutgan. Ko‘pincha noodatiy fikrlar, yechimlar kutilmaganda inson xayoliga keladi. Buning uchun, avvalo, fikrlash jarayonidagi bir xillikka, odatiylikka barham berilishi lozim.

Tadqiqot metodologiyasi: ushbu tadqiqot boshlang‘ich sinflarni tugatgan o‘quvchilarning bilimlarini tekshiradi, chunki boshlang‘ich sinflarning oxirgi yili o‘quvchilar rivojlanishidagi muhim bosqich hisoblanadi – bu vaqtda o‘quvchilar o‘qishni shunday o‘zlashtirishlari kerakki, u ularning keyingi ta’lim olishlari uchun vosita bo‘lishi lozim.

Kreativ fikrlovchi insonlar odatiy manzaralardan o‘zgacharoq tasvirlarni ham tasavvur qilib, hech kim ilg‘amagan jihatlarni payqaydi, yangilik yaratoladi.

Eng ajablanarli jihati, ta’lim-tarbiya jarayoni ham bolalarni bir xil fikrlashga o‘rgatib qo‘yarkan. Mashhur ixtirochi va kashfiyotchilarning aynan maktabdagi ta’lim jarayonidagi bir xillikka ko‘nikolmagani, qoliplarga sig‘maganini ko‘rish mumkin. Masalan, Albert Eynshteynning maktabdan haydalanishi yoki Dmitriy Mendeleevning kimyo fanidan «uch» olgani bunga misol bo‘ladi.

Ken Robinson tomonidan tayyorlangan va YouTube saytida 5 million marta tomosha qilingan «Maktab kreativlikni barbod etyaptimi?» nomli videolavhada ham shu xususida so‘z boradi. Harf o‘rganish jarayonidayoq bolalarning belgilangan chiziqlar bo‘ylab yozishi, topshiriqlarni bajarishda namunalar orqali ishlashi, adabiyot darslarida asarni qanday tushunish kerakligi to‘g‘risida ma’lumotlar berilishi, pedagoglarning yaxshi bajaruvchilarni yaxshi baholashi natijasida bolalar qoliplar doirasida fikrlay boshlaydi.

Oqibatda ko‘plab yoshlar topshiriq berilsa, namuna bormi, deb so‘raydigan holga kelgan. Bu oldin mavjud bo‘lgan modellar asosida ishlashga o‘rganib qolish

natijasi. Bunday vaziyatni bartaraf etish uchun o'quv jarayonida ijodkorlik sifatlarini tarbiyalashga ahamiyat qaratilishi maqsadga muvofiq. Masalan, o'quvchilarga «Sizga bir kunda 86400 AQSh dollari berilsa, uni nimalarga sarflagan bo'lardingiz?» kabi noodatiy savollar berilishi mumkin. Bu savol o'quvchining topqirlik, bilag'onlik, ijodkorlik, masalaga turli nuqtayi nazardan qaray olish, yashirin jihatlarni ochish kabi xislatlarini rivojlantiradi. Sababi, 86 400 bir kundagi soniyalar miqdorini anglatadi. Savol orqali o'quvchiga har bir soniya qimmati anglatiladi, uni behuda sarflamaslik uqtiriladi. Agar o'quvchi savol tagidagi mohiyatni anglamasa, unda kreativ va evrestik sifatlar past hisoblanadi.

Ko'pgina yosh o'quvchilarning dastlabki mutolaasi aksariyat hollarda hikoya (masalan, hikoya to'plamlari yoki rasmlı kitoblar) yoki o'quvchilarga atrofıdagi dunyo haqida ma'lumot beradigan va savollarga javob beradigan ma'lumotli matnlardan iborat bo'ladi. Yosh o'quvchi uchun o'qish savodxonligining har ikki maqsadi ham muhim hisoblanadi. Shuning uchun PIRLS har bir o'qish turini baholashda matnlarni teng bo'lishni asosiy maqsad qilib olgan.

O'quvchilarning erishgan yutuqlarini baholash barcha o'quvchilardan emas, balki ushbu qatlam vakillari sifatida tanlab olingan o'quvchilardan ob'ektiv testlarni o'tkazish orqali amalga oshiriladi. Shuningdek, maktab direktorlari, o'qıtuvchilar, o'quvchilar, hattoki ota-onalardan so'rovnoma o'tkazilib, ta'lim sifatiga ta'sir etuvchi omıllarga doir qimmatli ma'lumotlar to'planadi.

Tadqiqot doirasida asosiy e'tibor tushunishni namoyon qilishdan o'zlashtirilgan ma'lumotlarni qanday qilib yangi loyihalar va vaziyatlarda qo'llay olish qobiliyatlarini namoyon qilishga qaratilmoqda. O'quvchi bu jarayonning faol qatnashuvchisi bo'lib, ma'no yaratadi, matn ustida mushohada yuritadi va samarali o'qish strategiyalarini ongli ravishda tanlab qo'llaydi. Har bir matn turi odatiy shakl va qoidalarga amal qilgan holda o'quvchiga matnni sharhlashga yordam beradi. Har qanday matn turli shaklga ega bo'lishi mumkin. Bular an'anaviy kitoblar, jurnallar, hujjatlar va gazetalar, shuningdek, raqamli ko'rinishdagi yozma shakllarni ham o'z ichiga oladi.

Barcha mamlakatlarda maktablarni tanlash mamlakatdagi barcha maktablar ro'yxatidan ehtimollik usuli bilan, ushbu maktabda so'ralgan parallel o'quvchilar sonini hisobga olgan holda, amalga oshiriladi. Tadqiqot jarayonlarini standartlashtirishga katta e'tibor beriladi. PIRLS tadqiqoti xalqaro muvofiqlashtiruvchi markaz tomonidan ishlab chiqilgan yagona ko'rsatmalar va qoidalarga muvofiq ravishda qat'iy olib boriladi. Tadqiqotning har bir bosqichi (namuna olish, tarjima qilish va moslashtirish, test va so'rovnoma, ma'lumotlarni tekshirish va qayta ishlash) xalqaro ekspertlar tomonidan nazorat qilinadi.

O'zbekistonda ham PIRLS topshiriqlaridan keng qo'llanish va unga nisbatan e'tibor berilmoqda. Dars jarayonida faol qo'llash, samarali ishlarni, jarayonlarni tashkil etish zamon talabi bo'ldi desak mubolag'a bo'lmaydi.

Shuning uchun ham boshlang'ich ta'lim o'qituvchilari PIRLS asosida topshiriqlar rejalashtirishi lozim.

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*Haydarov T.T.
Katta o'qituvchi, Jizzax politexnika instituti
Abdusaidov S.U.
Assistent, Jizzax politexnika instituti*

BO'LAJAK QURUVCHI MUHANDISLARNI TAYYORLASHDA MATEMATIK KOMPETENTLIGINI SHAKLANTIRISH

Annotatsiya. Maqola muhandislarni tayyorlashda matematik bilimlarni oshirishning ahamiyatini ko'rsatadi. Muammolar, texnologiyalar, va pedagogik usullar ko'rsatiladi.

Kalit so'zlar: bo'lajak quruvchi muhandislarni tayyorlash, matematik kompetentligi, amaliyotga yo'naltirilgan ta'lim, so'nggi texnologiyalar, matematik dasturlar, ko'p to'plamlilik, masalalar, hal qilish, pedagogik usullar, integratsiya, o'quv dasturlari, texnologik vositalar, amaliy ta'lim, muammolar, mustaqil fikrlash.

*Haydarov T.T.
senior teacher
Abdusaidov S.U.
assistant
Jizzakh Polytechnic Institute*

FORMATION OF MATHEMATICAL COMPETENCE IN THE TRAINING OF FUTURE CONSTRUCTION ENGINEERS

Abstract. The article shows the importance of improving mathematical knowledge in the training of engineers. Problems, technologies, and pedagogical methods are presented.

Keywords: training future construction engineers, mathematical competence, practice-oriented education, latest technologies, mathematical programs, multi-set, problems, solving, pedagogical methods, integration, curriculum, technological tools, practical education, problems, independent thinking.

Bo'lajak quruvchi muhandislarni tayyorlashda matematik kompetentligini shaklantirish bugungi kunda katta ahamiyatga ega. Matematik kompetentligi, muhandislik sohasida muhimdir, chunki muhandislar kompleks muammolarni hal qilish va yaratuvchi yechimlar topishda matematik bilimlaridan kuchlanishi lozim. Bu maqolada, matematik kompetentligini rivojlantirish uchun muhim usullar va texnologiyalar ko'rsatiladi. Bu usullar o'quvchilarni matematik bilimlarini oshirish va ularning muammolarni hal qilish qobiliyatlarini rivojlanishiga yordam beradi. Maqola, matematik kompetentligini oshirishda

muhim bo'lgan usullar va texnologiyalarni ta'kidlaydi. Bu usullar o'quvchilarning matematik bilimlarini oshirishga yordam beradi va ularni muammolarni hal qilish va mustaqil fikrlash qobiliyatlarini rivojlantiriladi.

Respublikamiz mustaqillikka erishganidan so'ng barcha sohalarda bo'lgani kabi ta'limda ham ulkan islohotlarni amalga oshirdi. «Ta'lim to'g'risida» hamda «Kadrlar tayyorlash milliy dasturi to'g'risida»gi qonunlarning ijrosini ta'minlash borasida ta'limning barcha bosqichlari uchun Davlat ta'lim standartlari va o'quv dasturlari yaratildi. O'zbekiston Respublikasi Vazirlar Mahkamasining 2017-yil 6-apreldagi «Umumiy o'rta va o'rta maxsus, kasb-hunar ta'limining davlat ta'lim standartlarini tasdiqlash to'g'risida»gi 187-son qarorida aynan umumiy o'rta ta'lim maktablarining umumta'lim fanlarini o'qitishning uzluksizligi va izchilligini ta'minlash, zamonaviy metodologiyasini yaratish, umumiy o'rta va o'rta maxsus, kasb-hunar ta'limi davlat ta'lim standartlarini kompetensiyaviy yondashuv asosida takomillashtirish masalalarida belgilangan vazifalar biz pedagoglarga ta'lim tizimiga juda katta mas'uliyat bilan yondashish talabini qo'ydi. Shu nuqtai nazardan ta'lim sohasidagi «Kompetensiya» termini bilan bog'liq bo'lgan kompetentlik, kompetensiyaviy yondashuv, tushunchalarining tahliliga qisqacha to'xtalsak. «Kompetensiya» so'zi» O'zbekiston milliy ensiklopediyasi»da»lot»,»competo»– «erishayapman, munosibman, loyiqman»deb izohlangan.

I.V.Lyxina hamda F.N.Petrovalar qarashlarida «Kompetensiya» tushunchasi lotin tilidan olingan bo'lib, competensia – «tegishli bir sohani biluvchi», «to'liq huquqga ega», «muayyan bir shaxs yoki korxonaning to'liq huquqga egaligi», «shaxsning bilimlari va tajribalari atrofidagi masalalar», - degan ma'nolarni bildirsa, kompetentlilik tushunchasi o'z bilimlari va huquqlariga tayangan holda muayyan bir masalalarni hal etish va echa olishga loyiqligi, fikr yurita olish malakasiga ega ekanligini bildiradi.

«Kompetentlik» tushunchasi ta'lim sohasiga psixologik izlanishlar natijasida kirib kelgan. Shu sababli kompetentlik —noan'anaviy vaziyatlar, kutilmagan hollarda mutaxassisning o'zini qanday tutishi, muloqotga kirishishi, raqiblar bilan o'zaro munosabatlarda yangi yo'l tutishi, noaniq vazifalarni bajarishda, ziddiyatlarga to'la ma'lumotlardan foydalanishda, izchil rivojlanib boruvchi va murakkab jarayonlarda harakatlanish rejasiga egalikni anglatadi. Tadqiqotchi V.S.Merlin nuqtai nazarida kompetentlilik bu – yo'naltirilgan, uddalay oladigan motivasiyadir - deb ifodalansa, A.A.Leontev fikricha, kompetentlilik munosabati ilg'or pedagogik jarayon hisoblaydi. Kompetensiyaviy yondashuvni amalga oshirishning mohiyati ta'limni modernizatsiyalashda (ta'lim va tarbiyaning o'zaro birgalikdagi harakati), uning sifat jihatidan o'zgarishi, tarbiyaning ustuvor yo'nalishi sifatida yangi insoniy qadriyatlar tizimini yaratishda yaqqol namoyon bo'ladi. Kompetensiyaviy yondashuvga asoslangan ta'lim har bir o'quvchining hozirgi zamon talablariga javob beradigan, kelajakda barkamol inson bo'lib yetishishiga imkon beradigan ta'limdir. Bunday ta'lim jarayonida o'quvchi tegishli o'quv fanidan yuqori baho

olish uchungina emas, balki o'zligini anglagan holda bilim, ko'nikma va malakalarga ega bo'lishga intiladi va faol fuqarolik pozitsiyasiga ega bo'lish, tashabbuskorlik, mediaresurslar va axborot-kommunikasiya texnologiyalaridan o'z faoliyatida oqilona foydalana olish, ongli ravishda kelgusidagi kasbiga mas'uliyat bilan yondashish, sog'lom raqobat hamda umummadaniy ko'nikmalarni shakllantirishga xizmat qiladi.

Начало формы

1. Amaliyotga yo'naltirilgan ta'lim: Matematikani o'rganishni o'lchovsiz amaliyotga yo'naltirilgan ta'limning ustuvor maqsadi bo'lishi kerak. O'quvchilarning matematik qarashlarini, masalalarni tahlil qilish va ularni hal qilish usullarini o'rganish orqali, ularning muammolarini hal qilishga mo'ljallangan muhit yaratilishi lozim.

2. So'nggi texnologiyalardan foydalanish: Interaktiv darsliklar, matematik darslarini o'siyotgan o'yinlar, masala yechish uchun dasturlar va boshqa texnologik vositalardan foydalanish o'quvchilarning matematik kompetentligini rivojlantirishda yordam berishi mumkin.

3. Matematik dasturlarini taqdim etish: O'quvchilar uchun relevnt matematik dasturlarini taqdim etish, masalan, algebra, geometriya, aniq aniq funksiyalar, integrallar va differensiallar, matematik modellar, statistika va olasiliklar, va boshqalar. Bu dasturlar o'quvchilarning matematik asoslarini mustahkamlash va ularga qiziqishini oshirishga yordam beradi.

4. Ko'p to'plamlilik bilan masalalarni yechish: O'quvchilarga ko'p to'plamlilik bilan matematik masalalarni yechishni o'rganish orqali ularning tahlil va qarash qobiliyatlari rivojlanishi mumkin. Bu masalalar o'quvchilarning muammolarga oid boshqa oqimlarni va algoritmik fikrni rivojlantirishi uchun yaxshi imkoniyat beradi.

5. Amaliyotga yo'naltirilgan loyihalar: Matematikani nazariy bilimdan amaliyotga yo'naltirilgan loyihalar orqali o'rgatish o'quvchilarning matematik kompetentligini oshirishda yordam berishi mumkin. Ular o'quvchilarning matematik bilimlarini real hayot bilan bog'lash, ma'lumotlarini amaliyotga o'tkazish, masalalarni hal qilish va natijalarni tahlil qilishga imkon beradi.

6. Boshqa fanlar bilan integratsiya: Matematika va boshqa fanlar, masalan, fizika, kimyo, kompyuter ilmi, va boshqalari bilan integratsiya, muhiti sozlash va ma'lumotlarining matematik modellarini o'rganish o'quvchilarning matematik kompetentligini oshirishga yordam berishi mumkin.

7. O'quv dasturlarining rivojlanishi: Matematika o'quv dasturlarini rivojlantirish va ularga pedagogik qulayliklar qo'shish o'quvchilarning matematik kompetentligini oshirishda katta ahamiyatga ega. Raqamli matematikani amaliyotga yo'naltirilgan usullar orqali o'rgatish, o'quv dasturlarida qo'llanilgan boshqa pedagogik innovatsiyalar bilan integratsiya, masalan, ishlab chiqarish, ilmiy tadqiqotlar, masala yechishning boshqa usullari, va boshqalar.

Matematik kompetentligini shakllantirishda bu yo'llardan foydalanish o'quvchilarning matematik bilimlarini rivojlantirish va ularning mustaqil fikrlash va muammolarni yechish qobiliyatlari rivojlanishiga o'z ta'siri bor.

Matematik kompetentligini rivojlantirishda amaliy ta'lim, so'nggi texnologiyalardan foydalanish, matematik dasturlarini taqdim etish, va ko'p to'plamlilik bilan masalalarni yechish muhimdir. Bu usullar o'quvchilarning matematik bilimlarini oshirish va ularning mustaqil fikrlash va muammolarni hal qilish qobiliyatlari rivojlanishiga yordam beradi.

Bo'lajak quruvchi muhandislarni tayyorlashda matematik kompetentligini oshirishga doir usullar maqolada ko'rsatilgan. Bu usullar o'quvchilarning matematik bilimlarini rivojlantirish va ularning muammolarni hal qilish qobiliyatlari rivojlanishiga o'z ta'sirini ko'rsatadi.

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Hayitov J.
senior teacher
SIES
Toshniyozova M.
student
SIES
Nizomova D.
student
SIES

ANALYSIS OF ECOLOGICAL SERVICES: CHALLENGES AND RESOLUTIONS

Abstract. The consideration of ecosystem values is insufficient in decisions pertaining to natural resources. Within this particular context, the notion of ecosystem services presents a significant prospect for constructing a structure that supports the prudent utilization of biodiversity and other natural resources.

While it has been acknowledged that using ecosystem services to assess biodiversity has its benefits, the classification systems used often combine the methods used to achieve these services with the services themselves in the same category. This restricts their involvement in choices related to biodiversity. The lack of clarity in the definitions of important terminology, such as ecosystem processes, functions, and services, worsens this predicament. This paper establishes a classification of ecosystem services that serves as a framework for decision-making in natural resource management, following a thorough examination of definitions and the fundamental elements of an efficient typology. Nevertheless, additional effort is necessary to address specific challenges, such as the categorization of socio-cultural services.

Keywords: ecosystem, biodiversity, efficient typology, biodiversity protection, natural vegetation, Terrestrial features.

Introduction. Ecosystem services are being increasingly advocated as a method for documenting the worth that humans assign to ecosystems. This trend is significant, especially in the context of biodiversity protection, where values are frequently challenging to articulate in economic terms and seldom adequately justified in decisions regarding natural resources. In order for ecosystem services to serve as a useful framework for making decisions about natural resources, they need to be categorized in a manner that enables comparisons and trade-offs among the various potential advantages. According to the Millennium Ecosystem Assessment (2005), an adequate classification of ecosystem services should include all the advantages that contribute to human well-being.

Nevertheless, the categorization of ecosystem services by prominent experts, such as Costanza et al. (1997), De Groot et al. (2002), Millennium Ecosystem Assessment (2005), and Farber et al. (2006), combines the methods (means) used to achieve services and the services themselves (ends) in the same classification category. While these articles hold significant value, their classifications provide intrinsic challenges for decision-makers, a matter that will be examined further. The issue also emerges in broader literature and practical applications of ecosystem services and comparable assessments (e.g., Abel et al., 2003; Groffman et al., 2004; Anielski and Wilson, 2005; Kremen, 2005; Naiman et al., 2005).

Limitations of existing classification schemes. To make successful decisions, it is necessary to classify services. The choices are designed in a way that they create a consistent set with the characteristics outlined for multi-criteria decision analysis by Burgman (2005). The classification of services provided by the Millennium Ecosystem Assessment is widely accepted in the current literature. A simplified version of this table, referred to as Table 2, is shown here. In order to evaluate the effectiveness of this classification system, let us examine the scenario of a natural resource manager that oversees an area that consists of a combination of agricultural land and natural vegetation. The manager opts to utilize the list provided in Table 2 to guarantee a coherent arrangement of management outcomes. Consequently, the manager chooses the following as the primary services for initial planning:

The resources mentioned are food, fibre (used for construction lumber), and fresh water.

- Pollination
- Regulation of water
- Recreation and ecotourism
- Values pertaining to spirituality and religion

The two topics are photosynthesis and soil formation. In order to examine the planning consequences, the manager creates a basic schematic that illustrates some ecological connections that will require management. Based on the interactions depicted in Figure 2, it is clear that the manager does not prioritize pollination, water regulation, photosynthesis, and soil formation as individual objectives.

Biodiversity refers to the variety of life forms present in a particular ecosystem or on Earth as a whole. Biodiversity encompasses a wide range of life forms, such as plants, animals, fungi, microbes, and more. The word is limited to live organisms, thereby excluding the variety of habitats. The term «biodiversity» in this article primarily refers to natural biodiversity, unless specified differently. However, it should be noted that the term incorporates both natural and cultural biodiversity.

Biodiversity resource An organism, or collection of organisms, that serves a purpose for humans. An ecosystem is a complex network of living organisms,

their physical environment, and the interactions between them. A «functional entity or unit formed locally through the interaction of all organisms and their physical (abiotic) environment» (Tirri et al., 1998). All the ecosystems examined in this analysis consist of natural components to some extent. Ecosystem function refers to the processes and interactions that occur within an ecosystem, which contribute to its overall functioning and stability. If the ecosystem services, processes, structure, and composition are well-defined, then there is no need for this word. Considering the inconsistent and unclear usage of the phrase, «ecosystem function» is considered synonymous with «ecosystem processes» in this context, and is not utilized. Refer to the Appendix for a definition of structure and composition and for more explanation of 'ecosystem function'. Ecosystem processes refer to the various biological, chemical, and physical activities that occur within an ecosystem, influencing its functioning and dynamics. Ecosystem processes refer to the intricate interactions between living and non-living components of ecosystems that result in a specific outcome. Generally, these processes entail the movement of energy and substances (Lyons et al., 2005). A crucial differentiation exists between ecosystem components (including both living and non-living entities) and processes. The former are typically tangible entities quantified in terms of quantity, while the latter refer to operations and reactions described in terms of rates (such as production per unit time).

Ecosystem services Here, «used» refers to the definition given in the Millennium Ecosystem Assessment (2005, p. 1) as «the advantages that individuals derive from ecosystems» The benefits encompass resources such as food, water, timber, and cultural values. These advantages are the desired results of ecosystem management. The meaning of the term 'service' in this context is unclear and is explored in the Appendix.

Values held by humans The desired outcomes of existence, encompassing the conditions necessary for human survival and reproductive achievement, which collectively define human well-being. Refer to the Appendix for additional clarification. Natural factors encompass various components, such as:

- Biotic diversity
 - Terrestrial features, including:
 - Top layer of soil and loose material covering bedrock
 - Physical landscape The topic is minerals. The three main elements are water, air, and energy, which includes sources such as solar and coal.
- Socio-cultural factors encompass various aspects, such as cultural variety, which includes both domestic livestock and human populations.

- Infrastructure such as roads, buildings, cars, and homes, as well as household appliances.

- Energy generated through the process of nuclear fission.

Ecosystem processes facilitate the redistribution of matter and energy among resources, or generate new resources through evolution. The processes encompassed are as follows:

- Hydrological cycle
- Biogeochemical cycles
- Carbon cycle
- Energy flow
- Disease and pest regulation
- Photosynthesis
- Atmospheric regulation
- Flood control
- Social dynamics
- Economic activities

Revised framework and makeup of ecosystem (To simplify, we assume that natural assets include both living and non-living constituents of an ecosystem, rather than just a portion of them.)

Instead, they are all methods (procedures) used to accomplish goals (services) such as producing food and providing drinkable water. The manager will actively oversee these processes to ensure the production of sufficient quantities of food, fiber for construction, and spiritual experiences, among other things, in alignment with the overall management objectives. Therefore, the services provided in Table 2 do not form a cohesive set of services that can be examined and compared in a decision-making system. Processes such as pollination, soil formation, and water regulation are mechanisms via which several services are provided. Based on the definitions given, it is clear that these activities are undeniably part of the ecosystem. This suggests that they are methods or mechanisms to obtain services, rather than the services themselves.

Conclusion. Ultimately, the examination of ecological services poses a substantial difficulty in the current dynamic global environment. A thorough comprehension of ecosystem functioning and the vital services they give to civilization is necessary due to the intricate interplay between the environment and human activity. Although faced with difficulties, there exist numerous potential alternatives that can enhance our administration of ecological services. First and foremost, it is essential to enhance awareness and education regarding the significance of ecological services to cultivate a deeper understanding and recognition of nature, as well as to encourage the adoption of sustainable behaviors. This can be accomplished by actively involving the community, implementing educational programs focused on the environment, and enacting policies that promote conservation.

In summary, although the examination of ecological services may pose difficulties, by collaborative endeavors and inventive resolutions, we can strive towards a future that is more environmentally sound, allowing for the flourishing of both nature and society.

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Ibragimov S.L.
Qarshi xalqaro universiteti dotsenti
Muhiddinova G.Sh.
Qarshi xalqaro universiteti dotsenti

KO'RSATKICHLI VA LOGARIFMIK TENGLAMALAR SISTEMASINI YECHISHDA MANTIQUIY FIKRLASHNING AHAMIYATI

Annotatsiya. Mazkur maqolada texnika oliy o'quv yurtlarida ta'lim oladigan talabalarning mutaxassislik fanlarida uchraydigan ko'plab kasbiy masalalari, ularni yechishda matematik modellashirishning ahamiyatlari, turli xil yondashuvlar keltirib o'tildi.

Kalit so'zlar: logarifm, ko'rsatkich, radioaktivlik, yarim yemirilish davri.

Ibragimov S.L.
associate professor
Karshi International University
Muhiddinova G.Sh.
associate professor
Karshi International University

THE IMPORTANCE OF LOGICAL THINKING IN SOLVING THE SYSTEM OF EXPONENTIAL AND LOGARITHMIC EQUATIONS

Annotation. In this article, many professional issues of students studying in technical higher educational institutions, the importance of mathematical modeling and various approaches to solving them, were mentioned.

Key words: logarithm, index, radioactivity, half-life.

Logarifmlar va logarifmik ayniyatlarning ahamiyati: Logarifmlar o'z davri uchun haqiqiy ilmiy inqilob o'laroq namoyon bo'lgan edi. Logarifmlardan foydalanish - muhandislarga hamda munajjimlarga hisob-kitoblarni yanada tezkorroq va aniq bajarish imkonini bergan. Logarifmik chizg'ichni esa, dastlabki tezkor hisoblash texnikasi deyish mumkin. Kompyuterlarning paydo bo'lishi bilan logarifmlar o'z ahamiyatini biroz yo'qotgandek go'yo. Lekin ularning ilmiy ahamiyati zarracha kamaygan emas.

Bugungi kun uchun dolzarbligi: Logarifmlardan hozirda radioaktiv yemirilish (parchalanish) jarayonlarini tadqiq qilishda muhim matematik vosita sifatida qo'llanmoqda.

Logarifm bu - argumentni olish uchun asosni ko'tarish kerak bo'lgan daraja ko'rsatkichidir.

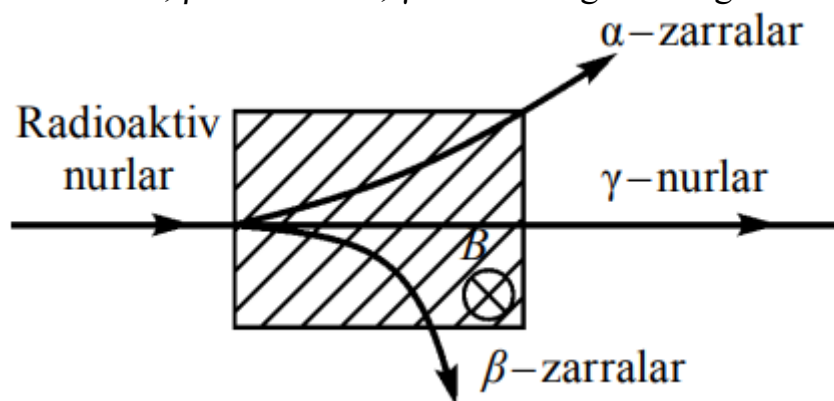
Radioaktiv moddalarning yarim yemirilish davrini topishda logarifmning ahamiyati.

Fransuz fizigi A. Bekkerel 1896-yilda uran tuzlarida luminessensiya hodisasini o'rganayotib, g'aroyib hodisaga duch keldi. Uran tuzini fotoplastinka ustida qoldirgan Bekkerel plastinkani ochganida plastinkaga tuzning surati o'tib qolganini ko'rdi. Tajribani bir necha bor takrorlagan Bekkerel, bunday tuzlar qog'ozdan, yupqa metallardan oson o'tuvchi, havoni ionlashtiruvchi, luminessensiya hodisasini vujudga keltiruvchi noma'lum nur chiqaradi, degan xulosaga keldi. Ushbu nurlar radioaktiv nurlar (lotincha radius – nur so'zidan olingan), radioaktiv nurlarni chiqarish esa radioaktivlik deb nomlandi.

Yadroning o'z-o'zidan bir yoki bir nechta zarrachalar chiqarish hodisasi **radioaktivlik** deyiladi (1-rasm). Shunday yadrolarni radioaktiv yadro deb yuritiladi. Radioaktiv yadrolarning o'zidan biron-bir turdagi zarralarni chiqarib, boshqa yangi yadroga aylanish jarayoni radioaktiv yemirilish deyiladi.

Tabiatda mavjud yadrolarning radioaktivligi tabiiy radioaktivlik deyiladi. Ba'zi hollarda radioaktiv yadrolar biror-bir turg'un yadrolarni zarralar bilan yoki yadrolar bilan bombardimon qilish natijasida hosil bo'ladi. Bunday radioaktivlikni sun'iy radioaktivlik deyiladi.

Radioaktiv moddani magnit maydoniga joylashtirilsa zarralar dastasi uch qismga α -zarrachalar, β -zarrachalar, γ -zarachalarga bo'lingan.



1-rasm

Radioaktiv yemirilishda radioaktiv yadrolarning sonining o'zgarishi

$$N = N_0 e^{-\lambda t} \quad (1)$$

qonun bo'yicha o'zgaradi. Ushbu ifodani radioaktiv yemirilish qonuni deb yuritiladi,

bunda λ – yemirilish doimiysi.

Agar $t = T$ bo'lsa, unda $N = \frac{N_0}{2}$ va radioaktivlik yemirilish qonuniga muvofiq:

$$\frac{N_0}{2} = N = N_0 e^{-\lambda T}.$$

Ushbu formulani potensirlab quyidagini olamiz: $\lambda T = \ln 2$ yoki $T = \frac{\ln 2}{\lambda} = \frac{0,693}{\lambda}$ ni hosil qilamiz.

Ko'rsatkichli va logarifmik tenglamalar sistemasini yechishda asosan ularning xossalariga tayanamiz. Bunda o'quvchi ifodalardagi shakl almashtirishlar va soddalashtirishlarni to'g'ri amalga oshira bilishi muhimdir. To'g'ri va asosli fikrlash orqali shakl almashtirishlar masala yechimining asosi hisoblanadi. Quyida misollar orqali fikrlarimizni asoslasak.

$$\begin{cases} 10^{2-\lg(x-y)} = 25 \\ \lg(x-y) + \lg(x+y) = 1 + \lg 4 \end{cases} \text{ ko'rinishidagi sistemani yechsak.}$$

Bu tenglamalar sistemasini yechish uchun natural ko'rsatkichli darajaning va logarifmning xossalaridan foydalanamiz.

Sistemadagi birinchi ifodani shakl almashtiramiz: $10^{2-\lg(x-y)}$ tenglikning chap tomonidagi ifodani natural ko'rsatkichli darajaning $\frac{a^m}{a^n} = a^{m-n}$ xossasiga ko'ra shakl almashtiramiz.

$$10^{2-\lg(x-y)} = \frac{10^2}{10^{\lg(x-y)}} = 25 \Rightarrow \frac{100}{10^{\lg(x-y)}} = 25 \Rightarrow 10^{\lg(x-y)} = 4$$

Logarifmning $a^{\log_a b} = b$ xossasiga ko'ra $10^{\lg(x-y)} = x-y = 4$ ya'ni $x-y = 4$ (1) tenglik hosil bo'ladi.

Endi sistemadagi ikkinchi ifodani shakl almashtiramiz.

Logarifmning quyidagi $\log_a f(x) + \log_a g(x) = \log_a f(x) \cdot g(x)$ ($a > 0, a \neq 1$) xossasidan foydalanamiz.

$$\lg(x-y) + \lg(x+y) = 1 + \lg 4$$

$$\lg(x-y)(x+y) = 1 + \lg 4$$

$$\lg(x^2 - y^2) = 1 + \lg 4$$

$$\lg(x^2 - y^2) = \lg 10 + \lg 4$$

$$\lg(x^2 - y^2) = \lg 40$$

Demak, $x^2 - y^2 = 40$ (2) bo'ladi. (1) va (2) ifodalarni sistemaga olb borib qo'yamiz.

$$\begin{cases} 10^{2-\lg(x-y)} = 25 \\ \lg(x-y) + \lg(x+y) = 1 + \lg 4 \end{cases} \Rightarrow \begin{cases} x-y = 4 \\ x^2 - y^2 = 40 \end{cases}$$

Bu ikki no'malumli tenglamalar sistemasini ikki usul bilan yechish mumkin.

1-usul: $\begin{cases} x-y = 4 \\ x^2 - y^2 = 40 \end{cases}$ sistemadagi $x^2 - y^2$ ifodani qisqa ko'paytirish

formulasiga ko'ra $x^2 - y^2 = (x-y)(x+y)$ debyozibolamiz. Bundan $x^2 - y^2 = 4(x+y) = 40 \Rightarrow x+y = 10$ (3) ifoda kelib chiqadi.

(1) va (3) ni sistemaga olib borib qo‘ysak $\begin{cases} x - y = 4 \\ x + y = 10 \end{cases}$ ifoda hosil bo‘ladi.

Sistemadagi ikkala ifodani hadma-had qo‘shib yuborsak $2x = 14 \Rightarrow x = 7$ ga ega bo‘lamiz. x ning qiymatini (1) ifodaga qo‘ysak $7 - y = 4 \Rightarrow y = 3$ bo‘ladi. Bu qiymatlarni sistemaga qo‘yib tekshiramiz.

$$\begin{cases} 10^{2-\lg(7-3)} = 25 \\ \lg(7-3) + \lg(7+3) = 1 + \lg 4 \end{cases} \Rightarrow \begin{cases} 10^{2-\lg 4} = 25 \\ \lg 4 + \lg 10 = 1 + \lg 4 \end{cases} \Rightarrow \begin{cases} \frac{10^2}{10^{\lg 4}} = 25 \\ \lg 4 + 1 = 1 + \lg 4 \end{cases} \Rightarrow \begin{cases} 25 = 25 \\ \lg 4 + 1 = 1 + \lg 4 \end{cases}$$

2-usul: $\begin{cases} x - y = 4 \\ x^2 - y^2 = 40 \end{cases}$ sistemadagi birinchi ifodadan x ni topib ikkinchi

ifodadagi x ni o‘rnigaolib borib qo‘yamiz. Demak, $x - y = 4 \Rightarrow x = 4 + y$ ni ikkinchi ifodadagi x ni o‘rnigaolib borib qo‘yamiz.

$$(4 + y)^2 - y^2 = 40$$

$$16 + 8y + y^2 - y^2 = 16 + 8y = 40$$

$$8y = 24$$

$$y = 3, x = 7$$

Demak, ikkala usulda yechganimizda ham $x = 7$ va $y = 3$ yechimlarga ega bo‘ldik.

Xulosa

Fizik jarayon hisoblanadigan radioaktiv moddalarning yarim yemirilishi, uning davrini topishda ko‘rsatkichli va logarifmik tenglamalar sistemasiga olib kelinishi, keltirilgan funksiyalarning xossalardan foydalanish, ifodalardagi shakl almashtirishlar va soddalashtirishlar yordamida masalaning javobini topish uchun qadamlar ketma-ketligi muhim hisoblanadi. Mazkur fizik jarayonga yoki texnika yo‘nalishida taxsil olayotgan talabalarning o‘z mutaxassisliklariga mos turlicha kasbiy masalalariga mos matematik, fizik yoki ximik modellarni tuzish, ular ustida turlicha hisob-kitoblar olib boorish, kerakli natijalar, xulosalarga ega bo‘lishda yuqorida keltirilgan bilimlarni qo‘llash maqsadga muvofiq bo‘ladi.

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Ibragimova F.F.
teacher
Faculty of Medicine
Angren University
Tashkent Region, Angren City

NITRIC OXIDE ALLEVIATES CADMIUM- BUT NOT ARSENIC- INDUCED DAMAGES IN RICE ROOTS

Annotation. Nitrogen monoxide (nitric oxide – NO) is a ubiquitous gaseous molecule involved in numerous animal and plant physiological processes, and it is also a mediator of plant development and response to abiotic/biotic stresses. Different environmental stresses rapidly induce NO-production, which, in turn, participates to the regulation of the plant responses. Several researches have highlighted the involvement of NO in the regulation of plant response to toxic elements, including cadmium (Cd) and arsenic (As) pollutants.

Keywords: Arsenic Cadmium Nitric oxide Oryza sativa Peroxynitrite Root development Superoxide anion.

The NO-involvement in plant physiological/metabolic processes is due to its capability to modify numerous proteins, either directly through post-translational mechanisms, such as S-nitrosylation, nitration and nitrosylation, or indirectly by controlling the transcription of genes that encode proteins involved in stress responses. Various reports highlight that NO has an important role in reducing the damages in plant organs due to abiotic stresses by enhancing the activity of antioxidant enzymes. However, its role in the physiological processes depends on its cellular level. Indeed, at very low levels it functions as a signal molecule, on the contrary at higher levels becomes a stress-inducing molecule.

Cadmium and As soil pollution is of great concern because it prevents plant development by altering primary metabolic functions, by decreasing water and mineral nutrient uptake, and by inducing a general alteration in organ development, mainly in the root-system. Besides, the presence of Cd and/or As in the soil compromises the commercial value of the edible crops, and represents a potential risk to human health. Cadmium is present in the soil mainly as Cd²⁺. It easily enters in the root cells using the transporters of the essential nutrients, thus competing with them, or through aquaporins. Arsenic is mostly present in the environment in two inorganic forms: arsenite [As(III)], and arsenate [As(V)]. Organic forms are also possible. Arsenate, being an analogue of phosphate, enters the plant cells by the inorganic phosphate transport system., whereas arsenite uses the aquaporins of NIP subfamily. In the root cells, As(V) is easily reduced to As(III), with this reaction contributing to increase the cytosolic levels of ROS.

Nitric oxide decreases Cd and As uptake in rice seedlings

In order to investigate the effects of exogenous NO on Cd or As uptake and translocation, the accumulation of the heavy metal and of the metalloid was evaluated in the roots and shoots of the seedlings. Arsenic and Cd were mainly accumulated in the roots, and As, both as As(III) and As(V), was taken up more than Cd (Fig.1 A–B). The treatment with SNP significantly ($P < 0.01$) reduced the accumulation in the roots of both pollutants (Fig.1). The transport of Cd to the shoot was low, and the co-presence of SNP furtherly and significantly ($P < 0.01$) reduced it (Fig.1 A). Even the As was transported to the shoot at very low amounts, independently from the SNP presence (i.e., 6.41, 4.96, 12.06 and 9.11 mg/kg for As(III), As(III) plus SNP, As(V) and As(V) plus SNP, respectively) (Fig.1 B). The evaluation of the translocation factor (TF) and the bioaccumulation factor (BF) of both the elements, taken alone or combined with SNP, showed that the NO donor did not affect the translocation capability of the heavy metal and the metalloid from the root to the shoot, overall highlighting a significant role of NO in the reduction of the uptake of these elements in rice.

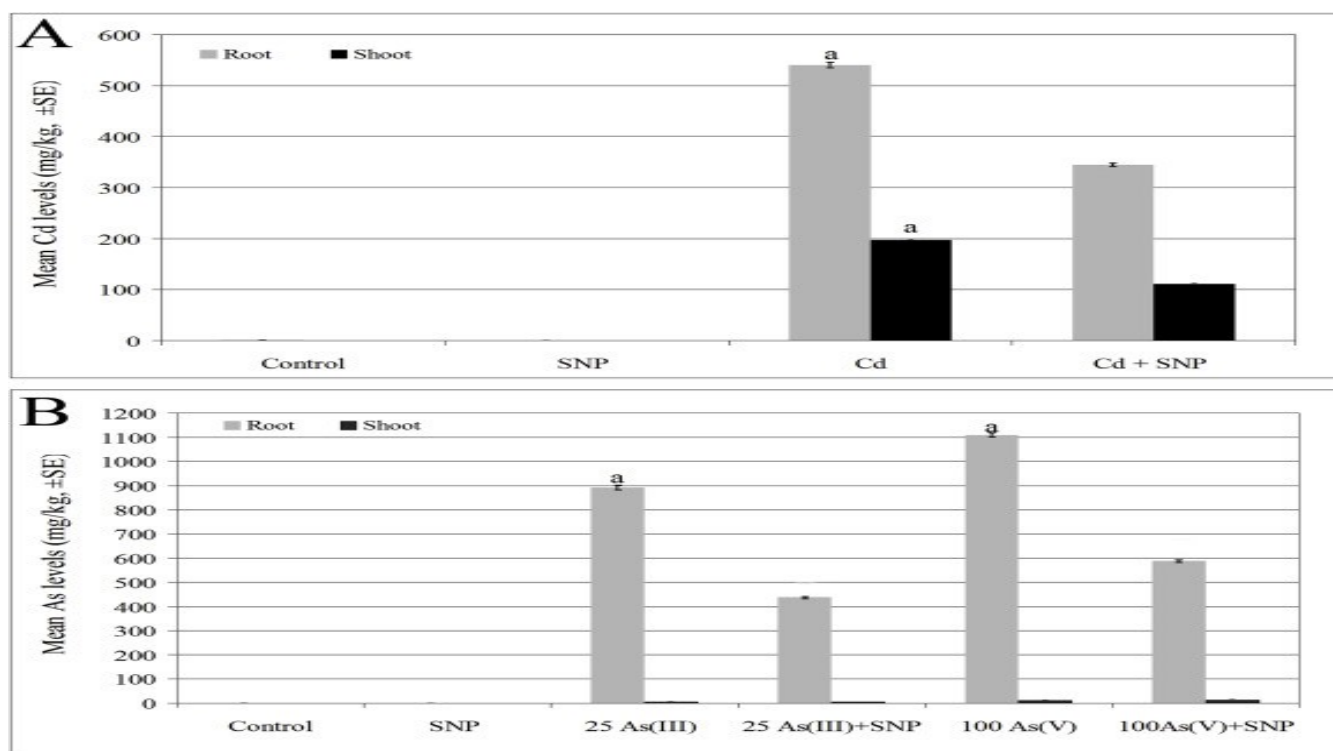


Figure. 1

Cadmium (A) and Arsenic (B) accumulation in roots and shoots of rice seedlings treated or not for 10 days with 100 μ M CdSO₄ (Cd), 100 μ M Na₂HAsO₄·7H₂O (As(V)) or 25 μ M NaAsO₂ (As(III)) or 50 μ M Na₂[Fe(CN)₅NO]·2H₂O (SNP) alone or combined. Letter a shows statistical difference, at least at $P < 0.05$ level, in comparison to the same treatment with/without SNP, for the same organ. Mean of tree biological replicates.

Nitric oxide reduces the histological alterations induced by Cd, but not all those induced by As. We deepened the investigation on the role of NO in the root alterations induced by Cd and As through histological and autofluorescence analyses on roots treated or not with Cd or As combined or not with SNP.

Nitric oxide reduces the histological alterations induced by Cd, but not all those induced by As. We deepened the investigation on the role of NO in the root alterations induced by Cd and As through histological and autofluorescence analyses on roots treated or not with Cd or As combined or not with SNP. It is known that Cd and As induce extensive damages in rice AR primary structure during LR-formation. To verify if the increased intracellular NO levels resulted into a reduction in these damages, a histological analysis was carried out in the AR region forming the LRPs, and the lignification in cell walls detected and quantified (Fig.2).

Fig. 2. Transverse sections of ARs at 2.0 cm from the root tip taken from rice seedlings treated or not for 10 days with 100 μM CdSO_4 (Cd), 100 μM $\text{Na}_2\text{HAsO}_4 \cdot 7\text{H}_2\text{O}$ (As(V)) alone or combined with 50 μM $\text{Na}_2[\text{Fe}(\text{CN})_5\text{NO}] \cdot 2\text{H}_2\text{O}$ (SNP). **A-B, D-E, G-H, J-K, M-N** and **P-Q** light microscope images of sections stained with toluidine blue. **C, F, I, L, O** and **R** images showing lignin autofluorescence (bright blue colour) in sclerenchyma and endodermis cell walls. Bar = 50 μm (B, E, H, K, N, Q) and 100 μm (A, C-D, F-G, I-J, L-M, O-P, R). cp, cortical parenchyma; ep, epidermis; ex, exodermis; s, sclerenchyma layer; en, endodermis. **S**, mean values ($\pm\text{SE}$) of lignin autofluorescence intensity in sclerenchyma and endodermis measured using ImageJ 1.52a software and expressed in arbitrary units (AUs). Letters a and b show statistical differences, at least at $P < 0.05$ level, for the same tissue and treatment, with/without SNP. Letter c shows statistical differences, at least at $P < 0.05$ level, for the same tissue in comparison with Control. Columns followed by the same letter within the same treatment with/without SNP are not significantly different $N = 30$.

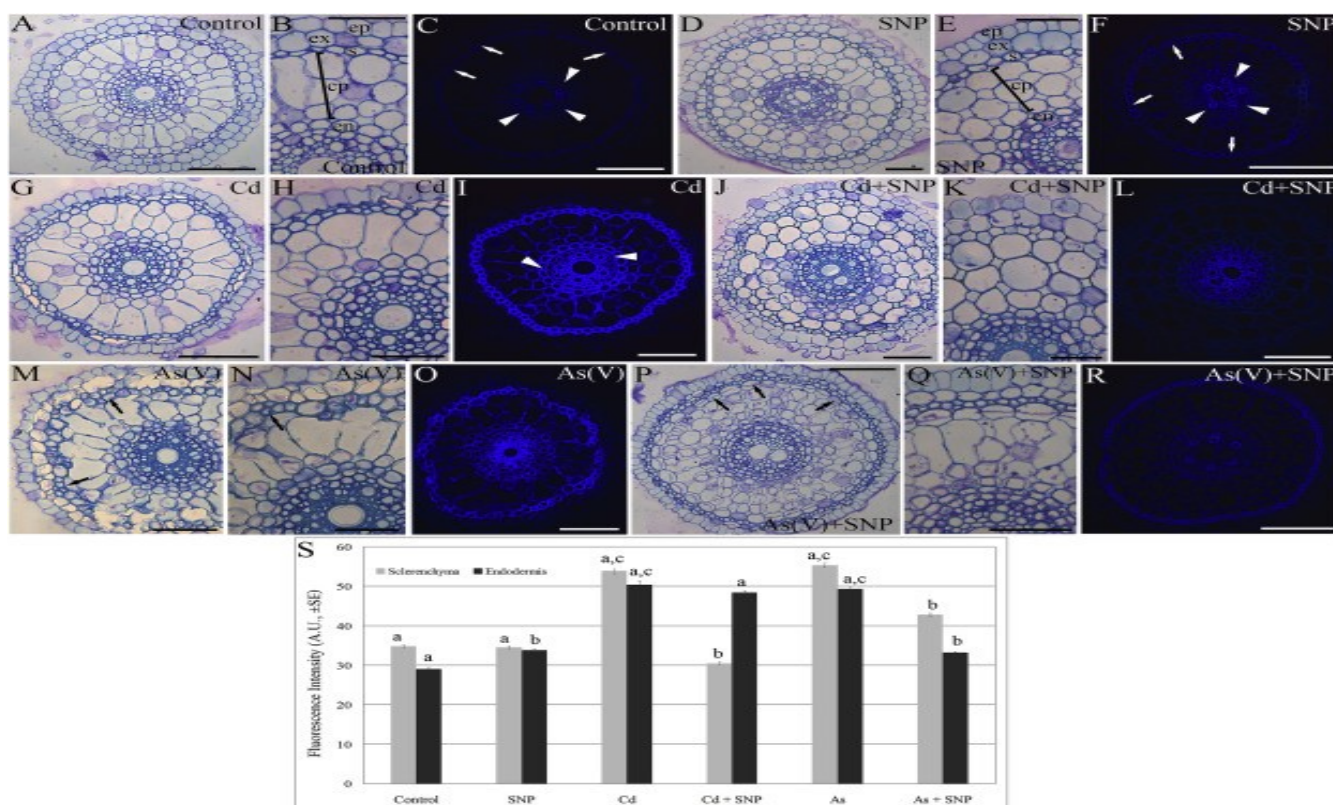


Figure. 2

The histological analysis showed that the SNP-treated roots, were characterized, as the Control ones, by regularly differentiated epidermis, exodermis, sclerenchyma layer, cortical parenchyma, endodermis and vascular bundles (Fig. 2. A–B, D–E). The autofluorescence analysis showed that the sclerenchyma cells were mildly lignified (Fig. 2. C, F, small arrows, and S), while the differentiated endodermis cells did not show regular lignin deposition in the cell walls (Fig. 2. C, F, arrowheads, and S). The Cd-alone-treatment induced a precocious aerenchyma formation and a strong thickening of the sclerenchyma cell walls due to a higher lignin deposition (Fig. 2. G–I and S). Also the endodermic cells were characterized by lignin deposition (Fig. 2. I, arrowheads), and the significant increase of lignin in the cell walls of sclerenchyma and endodermis was also confirmed by the increase of the lignin autofluorescence signal in both tissues (Fig. 2. S). The combined treatment of Cd and SNP significantly reduced cell wall lignification in the sclerenchyma (Fig. 2. J–L), with the lignin autofluorescence signal decreasing up to values comparable to the Control roots Fig. 2.S).

Considering that As(V) and As(III) induced similar histological alterations in root, here we show the images of arsenate-exposed roots only. The As-treatment determined an increase in the sclerenchyma and endodermis cell wall thickening, similarly to Cd, and a related enhancement in lignin autofluorescence (Fig. 2. M–O, S). Moreover, As also induced precocious aerenchyma formation, in addition to an anomalous proliferation of the sclerenchyma cells (Fig. 2. M–N,

arrows), and an alteration of the exodermis (Fig. 2. M). The NO-donor combined with As induced the roots to differentiate cells with a reduced lignin deposition, and a reduced autofluorescence signal (Fig. 2. P–R, S), but did not counteract the As-caused anomalous cell proliferation (Fig. 2. P–Q, arrows).

In conclusion, the results highlight that NO differently affects the responses of rice root-system to the toxicity of Cd and As. In fact, increased cellular levels of NO alleviate root damages induced by Cd by improving the entire root-system, but do not improve the root-system ability to counteract As toxicity. The explanation of this different behaviour is probably attributable to the NO-ability to restore the ROS/RNS cellular balance, differently altered by the two pollutants. Of course, further researches are needed to shed light on the full mechanisms governing NO action in pollutant environments.

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*Iskandarov A.
QMII «Moliya» kafedrası dotsenti
Hamdamova N.
QMII «Moliya» kafedrası magistranti*

QISHLOQ XO‘JALIGI KORXONALARIDA TAVAKKALCHILIKNI BOSHQARISH MUAMMOLARI VA YECHIMLARI

Annotatsiya. Mazkur maqolada qishloq xo‘jaligi risklarni boshqarish vositalari va uslubiy asoslari qo‘rib chiqilgan. Korxonada risklarni boshqarish tajribasi tahlil qilingan. Qishloq xo‘jaligi korxonalarida risklarni boshqarish tizimini shakllantirishning turli jihatlari keltirilgan. Risklarni miqdoriy va sifatli tahlil qilish usullari ko‘rib chiqilgan, qishloq xo‘jaligi korxonalarida riskini boshqarish algoritmi ishlab chiqilgan. Ushbu usullarni amalda qo‘llash muammolari aniqlangan.

Tayanch so‘z va iboralar: risk (ishlab chiqarish, moliya, tijorat, bozor, korporativ va qishloq xo‘jaligi risklari), risklarni boshqarish va baholash metodlari, risklarga ta‘sir qilish usullari va bosqichlari.

*Iskandarov A.
associate professor
«Finance» department
KEEI
Hamdamova N.
graduate student
«Finance» department
KEEI*

ISSUES AND SOLUTIONS OF RISK MANAGEMENT IN AGRICULTURAL ENTERPRISES

Abstract. This article examines agricultural risk management tools and methodological foundations. The experience of risk management in the enterprise is analyzed. Various aspects of forming a risk management system in agricultural enterprises are presented. Methods of quantitative and qualitative analysis of risks were considered, and an algorithm of risk management of agricultural enterprises was developed. Problems of practical application of these methods have been identified.

Key words and phrases: risk (production, financial, commercial, market, corporate and agricultural risks), methods of risk management and assessment, methods and stages of exposure to risks.

Kirish

Qishloq xo'jaligi sohasi eng xavfli sohalardan biri hisoblanadi, shu sababli qishloq xo'jaligi korxonalarining iqtisodiy faoliyati doimo risklarda'siri ostidadir. Odatda, qishloq tadbirkorlari xavfli vaziyatlarda qaror qabul qilishdan o'zlarini olib qochadilar, yuqori daromad olish mumkin bo'lgan hollar bundan mustasnodir. Hammaga ma'lumki, yuqori daromad to'g'ridan-to'g'ri yuqori risk darajasi bilan bog'liqdir. Shu sababli, riskli, ammo yuqori foyda keltiradigan vaziyatlarni boshqarishga talab oshib bormoqda. Agrosanoat majmui va umuman milliy iqtisodiyotga risklarning ta'sir darajasi, ayniqsa jahon miqyosida yuz berayotgan salbiy tendensiyalar (moliyaviy-iqtisodiy retsissiyalar, pandemiya) tufayli kelib chiqqan inqiroz sharoitida agrosanoat majmuasining risklarini qaytadan ko'rib chiqishni dolzarb masalaga aylantirdi.

Tahlil va natijalar

Iqtisodiy fan va amaliyotda risklarni yaxlit nazariyasi hali shakllantirilmagan. Ilmiy adabiyotlarda 50 dan ortiq turli riks mezonlari va 250 dan ortiq turlari keltirilgan. Birinchi marotaba, risk tushunchasi tadbirkorlikning funksional xususiyati XVII-asrda fransuz iqtisodchisi R. Cantillon tomonidan ilgari surilgan, u tadbirkorni noaniqlik sharoitida qarorlar qabul qiladigan va o'z manfaatlarini qondiradigan shaxs sifatida qaragan.

Risk va noaniqlik har qanday qaror qabul qilish uchun muhim bo'lgan ikkita turli atamadir. Bunda riskni nomukammal bilim sifatida aniqlash mumkin va yuz berishi ehtimoli mumkin bo'lgan natijalar ma'lumdir, noaniqlik esa ehtimoli mumkin bo'lgan hadisalar natijalarining noaniqligidir. Risk va noaniqlik qishloq xo'jaligidan muhimroq bo'lgan sohani tasavvur qilish qiyin. Bunda agrosanoat korxonalari risklarni boshqarishda yakka tartibdagi fermerlarga nisbatan keng imkoniyatlarga ega. Fermer esa risk va noaniqlik sharoitida qoladi va u uchun bu holatlarni yengib o'tish qiyin kechadi. Shu sababli ular faoliyatida risk menejmentini joriy etilishi muhim ahamiyat kasb etadi.

Riskning obyektiv mavjudligi sharoitida, korxonaning muvaffaqiyatli ishlashi uchun zaruriy shart bu riskning mavjudligini hisobga oladigan va bir tomondan uning korxonaga salbiy ta'sirini kamaytirishga imkon beradigan boshqaruv qarorlarini qabul qilish va amalga oshirish jarayoni sifatida belgilanadigan risklarni boshqarish tizimini shakllantirishdir, ikkinchi tomondan esa biznesning o'sishi va rivojlanishi uchun paydo bo'ladigan imkoniyatlardan samarali foydalanishdir.

Jahon va milliy ixtisoslashgan adabiyotlarda «risklarni boshqarish» («risk menejment») tushunchasi keng va tor ma'noda qo'llaniladi. Keng ma'noda, risklarni boshqarish bu risk sharoitida davlat apparati, ishlab chiqarish va iqtisodiy bo'limlar faoliyati yoki shaxsning hayoti uchun mavaffaqiyatli sharoitlarni yaratish san'ati yoki fanidir. Tor ma'noda risklarni boshqarish iqtisodiy riskni kamaytirishga qaratilgan aniq chora-tadbirlarni rejalashtirish va amalga oshirish jarayonidir. Bu har qanday tasodifiy yo'qotishlarni kamaytirish

dasturlarini ishlab chiqish va amalga oshirish shaklida yoki qarorlar ko‘rinishida amalga oshirilishi mumkin.

Zamonaviy sharoitida talab va taklifning beqarorligi, valyuta kursining o‘zgaruvchanligi, inflyatsiya jarayonlari, har bir mamlakat iqtisodiyotining hozirgi holatini belgilovchi ko‘plab boshqa omillar, shuningdek, korxonalar o‘z iqtisodiy faoliyati davomida duch kelishi mumkin bo‘lgan bir qator risklar mavjuddir. Risklarni minimallashtirishning qo‘yidagi asosiy usullari mavjud: sug‘urtalash; deversifikatsiyalash; o‘zini-o‘zi sug‘urtalashi; limitlashtirish; xedjdirlash; franchayzing va boshqalar. Bularning barchasi korxonaning bozorda izchil, barqaror va moliyaviy jihatdan mustaqil faoliyatni amalga oshirishga imkon beradi.

D.V. Bunkovskiy o‘z ilmiy ishlarida korxonalar risklarini boshqarish muamolarini tahlil qilgan. Korxonada risklarni boshqarish tizimini shakllantirishning turli jihatlarini o‘rgangan. Tadbirkorlik faoliyati xavfini miqdoriy va sifat tahlil qilish usullarini ko‘rib chiqqan, ularni korxonalar faoliyatida qo‘llash muammolarini aniqlagan. Shuningdek, muayyan korxonalar uchun risklarni boshqarish vositalaridan samarali foydalanish yoki maqbulini tanlash uning sanoat sohasi va faoliyat yo‘nalishlariga bog‘liqligidan kelib chiqadi degan xulosalarni shakllantirgan.

V.N. Xoxlovaning ilmiy ishlarida risklarni boshqarish jarayoni qo‘yidagi asosiy bosqichlarga ajratilgan:

- Riskning mohiyatini tahlil qilish, risk omillarini aniqlash, risklarni sifat va miqdoriy qo‘rsatkichlar bo‘yicha baholash;
- riskga ta’sir qilish usullarini taqqoslash orqali ularning samaraligini tanlash;
- qaror qabul qilish;
- riskga ta’sir qilish (kamaytirish, saqlash, o‘tkazish);
- riskni boshqarish natijalarini nazorat qilish.

Tadbirkorlik faoliyatidagi risklarni boshqarish tizimi daromadlarni shakllantirish va xarajatlarni qisqartirish, ular o‘rtasidagi muvozanatni ta’minlashga yo‘naltirilgan korxonaning boshqaruv tizimining bir qismiga aylanishi kerak, ya’ni u korxonaning umumiy strategiyasiga, uning rejalari va faoliyatiga qo‘shilishi, birgalikda olib borilishi lozim. Korxonaning strategiyasini ishlab chiqishda riskning mavjudligini hisobga olish kerak, aks holda u iqtisodiy rivojlanishni sekinlashtirishi mumkin, chunki salbiy ehtimoliy voqealarning ta’sirini hisobga olmasdan biznesni samarali faoliyatini yaratish mumkin emas.

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Isroilov F.M.
scientific researcher
Erkinov S.I.
student
Jizzakh Polytechnical Institute

THE ELECTRON-SPECTROSCOPIC INVESTIGATIONS OF THE EPITAXIAL CoSi_2 FILMS ON SILICON

Abstract. This work is devoted to the study of the electronic structure, optical properties and electric resistance of the epitaxial layers CoSi_2/Si produced in the ultrahigh vacuum conditions ($p=10^{-7}$ Pa) by the molecular beam epitaxy method on Si surface (111). It has been shown that the forbidden zone width of solid CoSi_2 films is 0.5-0.6 eV and there are two maximal of the electron state density in the valence zone. These films have the low specific resistance ($\rho=20-25 \mu\Omega\cdot\text{cm}$).

Keywords silicon, epitaxial, structure, vacuum, electron, zone, temperature, spectroscopy, CoSi_2 , molecular beam epitaxy method, electron-spectroscopic, silicid, peaks, spectra, films.

1. INTRODUCTION.

The good structural concordance of Si, CoSi_2 , CaF_2 and hence the growing of multi-layer systems from the layers of those materials combination are the first prerequisite to create devices with unique specifications. The creation of the Si- CoSi_2 -Si epitaxial structure allows the manufacturing of new type of ultrahigh frequency devices, e.g., transistors with metallic and permeable base. The main principle of such transistors creating is based on the change of the semiconductor base to the material having low electric resistance close to the metal one. In this respect, the more suitable material proved to be CoSi_2 films [1-4].

By now the regularities of the CoSi_2 film epitaxial growth on the Si single crystal surface have been studied. The optimal conditions of producing the uniform films have been determined, the type and parameters of the lattice, as well as the electric physical properties of these films have been investigated.

In the article the results of epitaxial $\text{CoSi}_2 / \text{Si}$ (111) formed by MBE, TFE and RA. Cobalt silicide layers grown on substrates such as Si doped by phosphorus-4,5, Si doped by boron -7.5, Si doped by boron -10. The growth of the films produced in ultrahigh vacuum MBE installation. Before epitaxial growth surface of the substrates were subjected to chemical cleaning and special cleaning vacuum. Detailed description of the installation of the MBE and purification methods contained in [5]. The thickness of the deposited cobalt in all cases was 100 Å, meanwhile, CoSi_2 film with thickness about 380 Å was formed. The one-

step processes were studied and a two-step growth. With two-stage increase in the growth of the film took place in two stages with different modes of growth.

This work is devoted to the study of the electronic structure, optimal properties and electric resistance of the epitaxial $CoSi_2/Si$ layers produced in the ultrahigh vacuum conditions ($p=10^{-7}$ Pa) by the molecular beam epitaxial method on Si surface (111). The optimal growth temperature is $T=850$ K and the optimal ratio of flows $SiCo$ is 2: 1. The films of the thickness $d=50-500$ Å have been studied [5].

2. RESULTS AND DISCUSSION.

Before the measurement of the $CoSi_2$ films were annealed in the ultrahigh vacuum conditions ($p=10^{-7}$ Pa) at $T=900-1000$ K for 3-4 hours. After the treatment on the HEED pictures taken for the films with $d>150$ Å the bright sharp point reflexes on Laue arcs were detected, that corresponds to the pure atomic smooth surfaces.

The photoelectrons spectra for the Si (111) and $CoSi_2$ films ($d=200$ Å) measured at $h\nu=10.8$ eV are given in fig. 1.

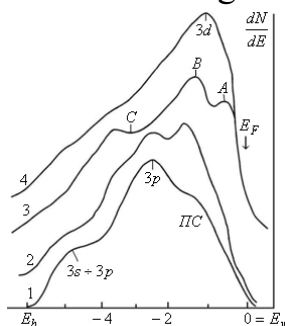


Fig 1. The photoelectrons spectra for the Si (111) and $CoSi_2$ films ($d=200$ Å) measured at $h\nu=10.8$ eV.

The abscissa axis is the electron binding energy E_b taken relative to the Fermi level E_F . It is seen that the shape and position of the main peaks for Si and silicide are visible distinguished from each other. In the pure Si case the presence of peaks (B, C, E) is explained by the electron excitation from $3p$, $3s$ states of valence electrons and from the surface states.

The parameters of the energy zones for Si and $CoSi_2$ defined according to the photoelectron spectra (fig.1) are given in table 1.

Table 1

Sample	Zone parameters, eV				
	ϕ	φ	E_g	χ	V_s
Si	5.1	4.7	1.1	4.0	0.3
$CoSi_2$	4.9	4.9	0.5	4.4	—

Table 1. Zone and energy parameters of Si and $CoSi_2$.

It can be seen from table I that from Si to $CoSi_2$ the decreasing (2 times) of the forbidden zone width E_g , the straightening of the zone band and some increasing of the electron affinity value occur.

The value of the both photoelectron ϕ and thermo electron φ work functions for Si and $CoSi_2$ do not sharp differ from each other. For $CoSi_2$ $F \approx \varphi$. So it can be

supposed that $CoSi_2$ is the degenerated semiconductor with the whole conductivity. The high electric conductivity of Co silicide can be due to this fact.

The electric resistance of the $CoSi_2$ films was defined by the 4-probes method [6]. The experimental result had been showed that in the case of the very thin films ($d > 100 \text{ \AA}$) the specific resistance value depends on both thickness and temperature of the film formation and in the solid films case ($d > 100-150 \text{ \AA}$) it depends mainly, on the formation temperature. The value of ρ for the $CoSi_2$ films growing at the different T are given in table 2.

So for the film width $d \approx 60 \text{ \AA}$ the value of ρ becomes higher and even at the optimal formation temperatures it is about $120-150 \mu\Omega.cm$. That is mainly due to the fact that the film is not solid. The solid films ($d \approx 200 \text{ \AA}$) growing at $T < 700-750 \text{ K}$ also have the high resistance. This fact is explained by insufficient ordering of the structure and by the high density of the point defects.

Table 2.

T, K	$\rho, \mu\Omega.cm$	
	$d \approx 60 \text{ \AA}$	$d \approx 200 \text{ \AA}$
600	250	110
750	–	50
900	150	20
1000	120	20
1100	–	40
1200	120	70

Table 2. The dependence of ρ on the temperature formation for $CoSi_2$.

The temperature increases of the film growth up to 900-1000 K results the sharp ρ decreasing ($20-25 \mu\Omega.cm$), that is connected with the essential crystal perfection improvement of $CoSi_2$ film. The further formation temperature increases ($T > 1100 \text{ K}$) is accompanied by the specific resistance increasing. That can be due to both the island film formation and the enrichment of the surface with silicon owing to silicon diffusion through the film.

The optical properties of $CoSi_2/Si(100)$ films have been also studied. For the example the dependence of the light reflection coefficient on the light wave length for the 200 \AA thickness film is given in Fig.2. It was shown that within the whole studied range of light wave length λ the k value increases with the λ increasing.

However, for $\lambda < 2-2.5 \mu$ the increasing is small and its value do not exceed 10-15%. The considerable k increasing occurs beginning with $\lambda = 2.5 \mu$, that approximately coincides with the edge of fundamental absorption $CoSi_2$. At $\lambda > 2.5 \mu$ the $h\nu$ value becomes less than the forbidden zone width ($E_g \approx 0.5 \text{ eV}$) of $CoSi_2$ and

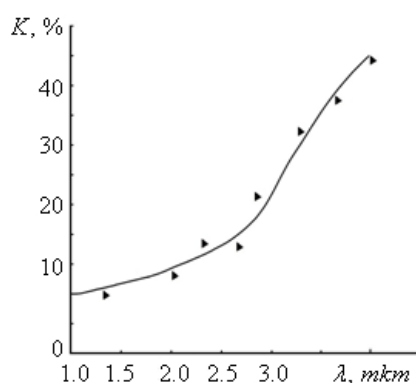


Fig 2. The dependence of the light reflection coefficient on the light wave length for the 200 Å thickness film hence the absorption coefficient sharply decreases. Apparently, that results in some increasing of the light reflection coefficient.

3. CONCLUSIONS.

1. The true information about the electron states density distribution in the valence zone and the energy parameters for $CoSi_2/Si$ films has been obtained.

2. It was shown that the electric resistance of $CoSi_2$ film produced by the molecular beam epitaxy method mainly depends on the thickness and temperature of the film formation. $CoSi_2$ is supposed to be a degenerated semiconductor with whole conductivity. High electric conductivity of Co silicide is explained by that fact.

3. The considerable increasing of the light reflection coefficient beginning with $\lambda=2-2.5 \mu$ was explained by the inter-zone transitions absence (fundamental absorption) in $CoSi_2$ at $\lambda>2-2.5 \mu$.

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*Jalilov O.A.
«Energetika» kafedrası assistenti
JizPI*

MUQOBIL ENERGIYA MANBALARINI O'QITISH JARAYONIDA ENERGIYA ISHLAB CHIQRISH USULLARI VA TAHLILI

Annotatsiya. Muqobil energiya olishning asosiy usullari energiya manbalari sifatida mustaqil bino va inshootlardan foydalanish imkoniyati nuqtai nazaridan ko'rib chiqiladi. Turli xil muqobil energiya manbalari tomonidan elektr energiyasini ishlab chiqarish xarajatlari to'g'risidagi ma'lumotlar keltirilgan. Muqobil energiya manbalarini almashish bo'yicha tavsiyalar berilgan.

Kalit so'zlar: Muqobil energiya, shamol generatori, gelioenergetika, quyosh kollektori, atrof-muhitni muhofaza qilish.

*Jalilov O.A.
assistant
"Energy" department
JizPI*

METHODS AND ANALYSIS OF ENERGY PRODUCTION IN THE PROCESS OF EDUCATION OF ALTERNATIVE ENERGY SOURCES

Abstract. The main methods of obtaining alternative energy are considered from the point of view of the possibility of using independent buildings and structures as energy sources. Data on the costs of electricity production by various alternative energy sources are presented. Recommendations on the joint use of alternative energy sources are given.

Keywords: Alternative energy, wind turbine, solar energy, solar collector, environmental protection.

Qayta tiklanmaydigan energiya manbalarining global zaxiralari pasayishi fonida yangi energiya manbalarini izlash va ma'lum alternativ energiya manbalarini joriy etish dolzarbdir. Mavjud yoki tejamkor qayta tiklanmaydigan energiya manbalarining hozirgi energiya iste'moli darajasida turli manbalarga ko'ra taxminan 50 dan 100 yilgacha qoldi. Muqobil energiya manbalarini izlash bilan bir qatorda, bugungi kunda ishlatiladigan energiya turlarining ekologik xavfsizligi birinchi o'ringa chiqadi [1, 2, 3].

Ushbu ish mustaqil bino va inshootlarning elektr energiyasi manbai sifatida maishiy ehtiyojlar uchun kam quvvatli (10 kVtgacha) muqobil energiya (elektr, issiqlik va bio - yoki boshqa yoqilg'i shaklida) olish usullarini ko'rib chiqishga bag'ishlangan.

Energiya olishning asosiy alternativ usullari orasida quyidagilarni ajratib ko'rsatish mumkin:

- shamol energetikasi;
- geliyenergetika;
- gidroyenergetika;
- bioyenergetika.

Shamol energetikasi - shamolning kinetik energiyasini elektr energiyasiga aylantirishga asoslangan energiya sanoati [4]. Energiyani konvertatsiya qilish, qoida tariqasida, shamol generatorlarining turli xil konstruksiyalari tomonidan amalga oshiriladi. Bugungi kunda bu muqobil energiyaning eng keng tarqalgan manbalaridan biri bo'lib, turli manbalarga ko'ra uning global elektr energiyasini ishlab chiqarishdagi ulushi 2% ga yetishi mumkin. Yevropa ittifoqining ba'zi mamlakatlarida shamol generatorlari yordamida ishlab chiqariladigan energiya ulushi 40% dan ortiq.

Shamol generatorining ishlashining asosiy sharti 3 m/s dan yuqori tezlikda harakatlanadigan havo massalarining mavjudligi, shuning uchun, qoida tariqasida, ularning joylashgan joyi qirg'oq zonalari, tepaliklar, tokchalar (qirg'oq zonasida joylashgan).

Zamonaviy shamol generatorlari balandligi 100 m dan oshishi mumkin va pichoqlarning diametri bir necha o'n metr ga yetadi. Nominal ish rejimlarida chiqish quvvati (shamol tezligi 10 m/s) 10 Mvtgacha yetadi.

Dizayn bo'yicha shamol generatorlarini gorizontaal va vertikalga bo'lish mumkin. Ikkinchi tur yanada istiqbolli, chunki u shovqinsizroq va shamol massasi tezligiga nisbatan kamroq talabchan (1 m/s dan), ammo bazi sabablarga ko'ra shamol generatorlarining gorizontaal konstruksiyalari ko'proq tarqalgan. Vertikal shamol generatorlarining ishlash muddati 20 yilgacha bo'lishi mumkin [5].

Shamol generatorlari yordamida olingan elektr energiyasining narxi an'anaviy energiya yordamida olingan elektr energiyasining narxi 1,5-2 so'm/(kVt*soat) bilan taqqoslanadi..

Shamol generatorlarining kamchiliklari orasida shovqinning nisbatan yuqori darajasi (shamol generatorining rotorini yaqinida 100 db gacha va 300 m masofada 45 db dan oshmasligi kerak), katta tebranish yuklari ham qayd etilishi kerak. Shu sababli, shamol generatorlarini turar-joy binolaridan 300 m dan kam bo'lgan masofada o'rnatish tavsiya etilmaydi.

Shamol energiyasidan foydalanishning yana bir usuli-bu bino va inshootlarni isitish uchun uni issiqlik energiyasiga aylantirish, bu yondashuv bilan shamol generatorining ulanish sxemasi va uni boshqarish ancha soddalashtirilgan hisoblanadi.

Shamol qurilmasining tuzilishi generator, generator joylashgan ustun, pichoqlar, batareyalar, inverterni o'z ichiga oladi.

Gidroyenergetika energiya ishlab chiqarish uchun harakatlanuvchi suv massalarining kinetik energiyasidan (to'lqinlar, oqim to'lqinlari, sharsharalar, okean, issiqlik energiyasidan foydalanish) foydalanadi. An'anaviy ravishda

muqobil gidroyenergetikani to'liqin va to'liqinli elektr stansiyalari, mini - va mikro GES, sharshara elektr stansiyalariga bo'lish mumkin.

To'liqin energiyasidan foydalanuvchi gidroyelektr stansiyalar bugungi kunda eng ko'p tarqalgan, to'liqin balandligi 13 metrgacha bo'lishi mumkin bo'lgan katta to'liqin mavjud bo'lgan joylarda qurilmoqda. Suv toshqini energiyasidan to'g'onlar o'rnatish orqali foydalanish mumkin, bu ekologik jihatdan juda xavfsiz emas, shuningdek, to'g'onlarni ishlatmasdan dengiz tubidagi suv oqimlari bo'lgan joylarda past tezlikli turbinalarni o'rnatish orqali foydalanish mumkin. Bunday turbinalar dengiz florasi va faunasiga deyarli zarar etkazmaydi. Bugungi kunda suv toshqini elektr stansiyalarining quvvati bir necha yuz Mvtgacha bo'lishi mumkin.

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To'liqin energiyasidan foydalanish biroz murakkabroq va qimmatroq elektr energiyasini olish imkonini beradi. To'liqinli gidroyelektrostansiya-bu dengiz tubiga birlashtirilgan stasionar platforma bo'lib, unga diametri bir necha metrgacha bo'lgan katta suzgichlar qo'llarga (shpallarga) o'rnatiladi, ular dengiz to'liqinlarida yuqoriga va pastga siljiydi, gidravlik silindrlar orqali elektr energiyasini ishlab chiqaruvchi generatorlarni boshqaradi. Bugungi kunda shu tarzda ishlab chiqarilgan elektr energiyasining nisbatan kichik miqdoriga qaramay, ushbu turdagi qayta tiklanadigan energiya manbalarining umumiy energiya potentsiali deyarli cheksizdir.

Mini va mikroGES daryolar, kichik daryolar, sharsharalardagi suv massalarining kinetik energiyasidan foydalangan holda o'z miqdorda, bir necha o'nlab kVtgacha elektr energiyasini ishlab chiqarishga imkon beradi. Balandlik farqi 1,3 m dan va suv sarfi 1 m³/s mikroGES girdob prinsipiga ko'ra 10 kVt / soatgacha elektr energiyasini olish imkonini beradi. Ular suv massalarining kinetik energiyasidan maksimal darajada foydalanishga imkon beradigan maxsus shakldagi pervanelli generatorlardan iborat [7].

Kichik gidroyenergetikaning asosiy afzalligi shundaki, u ob-havo sharoitlariga bog'liq emas va yilning istalgan vaqtida elektroyenergetika ishlab chiqarishni barqaror ravishda ta'minlaydi [8].

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*Jonikulova Z.B.
Sirtqi bo'lim o'qituvchi
Jizzax davlat pedagogika universiteti*

KICHIK MAKTAB YOSHIDAGI O'QUVCHILAR BILAN ISHLASHDA DIDAKTIK O'YINLARDAN FOYDALANISH

Annotatsiya. Kichik maktab yoshidagi o'quvchilar bilan ishlashda didaktik o'yinlardan foydalanishda har bir bolaning manfaatlarini va uning rivojlanish xususiyatlarini inobatga olish zarur. Shuning uchun, muayyan o'yinni ta'lim jarayonida tanlashda o'qituvchi katta mas'uliyatga egadir. Kichik maktab yoshidagi o'quvchilar uchun didaktik o'yinlar o'ziga xos xususiyatlarga ega.

Kalit so'zlar: didaktik, o'quvchi, individual didaktik, jismonan rivojlanishi, bola, o'yinchoqlar, so'z, maktab, pedagog, psixologik.

*Zhonikulova Z.B.
teacher of external education department
Jizzakh State Pedagogical University*

USE OF DIDACTIC GAMES WHEN WORKING WITH PRIMARY SCHOOL STUDENTS

Annotation. When using didactic games when working with students of a small school age, it is necessary to take into account the interests of each child and the features of his development. Therefore, when choosing a particular game in the educational process, the teacher has a great responsibility. Since pupils of school age are difficult to follow orders, didactic games for them have their own characteristics.

Keywords: didactic, student, individual didactic, physical development, child, toys, word, school, educator, psychological.

Kirish: Ta'lim va o'qitish mazmunining nazariy masalalarini, uning shakli va uslublarini pedagogikaning bir qismi bo'lgan didaktika o'rganadi. Umuman pedagogika singari didaktika ham rivojlanadi. Uning rivojlanishiga Yan Amos Kamenskiy hissa qo'shdi. Uning «Buyuk didaktika» asari o'qitishni rivojlanishiga katta ta'sir ko'rsatdi. Boshlang'ich ta'lim didaktikaning asoslari Shvetsariya pedagogi I.G.Pestolotsi asarlarida ishlab chiqilgan. Bulardan tashqari rus didaktikasining atoqli namoyondasi K.D.Ushinskiy bo'lgan. U ham o'qitish masalalarini chuqur psixologik asosini yaratdi. O'zbek xalqi orasida ham H.H.Niyoziy, A.Avloniy kabi pedagoglar yetishib chiqdi. Ular ham o'zbek xalq maktablarini ochish, o'quvchilarga darsliklar yozish kabi ishlarni davom ettirdilar.

Bugungi kunda mamlakatimizda ta'lim sohada amalga oshirilayotgan keng islohotlar vatan taqdiri, xalq ravnaqi, mustaqil yurtning kelajakdagi boshqaruvchi-lari yangi avlod tarbiyasiga qaratilmoqda. Mustaqil Vatanimizga har tomonlama yetuk, mukammal, axloqiy pok, yuksak ma'naviy xislatlarga ega, iymon-e'tiqodi butun, o'z xalqi, o'z ona - Vataniga fidoiy, barkamol insonlarni tarbiyalash davlat siyosatida ustuvor masalalardan biri sifatida qarala boshladi.

Didaktikaga asoslangan holda biz o'quvchilarga yanada samaraliroq bilim beramiz. Ta'lim jarayonida turli usullardan foydalanishimiz ham kerak. Dars turini to'g'ri va muvaffaqiyatli o'tish uslubini ham to'g'ri tanlasak dars yaxshi natija beradi. Har bir darsni ko'rgazmali va texnika vositalari bilan o'tkazish joizdir. Shundagina dars bilimga boy o'tadi. O'qituvchi izlanuvchan bo'lishi, darslarni rang-barang va turli tuman usulda o'tishi kerak. Dars qiziqarli o'tishi uchun faqat ko'rgazma qurollardan foydalanib qolmay, o'yin elementlaridan, dars davomida harakatli daqiqalardan foydalanish lozim. Didaktik o'yinlar texnologiyalari o'quvchi faoliyatini faollashtirish va jadallashtirishga asoslangan. Ular o'quvchi shaxsidagi ijodiy imkoniyatlarni ro'yobga chiqarish va rivojlantirishning amaliy yechimlarini aniqlash va amalga oshirishda katta ahamiyatga ega.

O'yin orqali bola faoliyati mukammallashadi, ularni jismonan rivojlanishiga yordam beradi. O'yin jarayonida qiyinchiliklarni, to'siqlarni yengishga o'rgatib boradi.

O'yin bolalar faoliyatining asosiy turi. Bola o'yin orqali materiallarning ko'rinishi, rangi, tuzilishi turli o'simlik va hayvonot olamidagi o'zgarishlarni anglaydilar. O'yin- bu bolalar uchun o'qish, mehnat qilish va tarbiya vositalaridir. Biroq, darsning asosiy qismini o'yin darsiga aylantirib qo'ymaslik lozim.

Asosiy qism: O'yin o'sib borayotgan bola organizmining zaruriy ehtiyojidir va u orqali bolalarda tashkilotchilik ko'nikmalari tarbiyalanadi. Ammo o'yin har qanday sharoitda ham o'yindir. Shunday o'yinlar ham borki, ular bolalarga mustaqillikni, oddiylikni, bir- biriga yordam berish hissini tarbiyalaydi.

Yan Amos Kamenskiy grammatik o'yinlardan sistemali foydalanishning ahamiyati xususida gapirib, bunday deb yozgan edi: «Bola sog'lom bo'lishi uchun u doimiy harakatda bo'lishi zarur, shundagina o'yin qiziqarli o'tadi. O'yinga rahbarlik qilish va bolalarning xatti-harakatlarini doimo kuzatib turishi kerak. Chunki bolalar o'yin jarayonida har tomonlama tarbiyalanadilar.

Didaktik o'yinlarning asosiy turlari: Intelektual (aqliy) va harakatli hamda aralash o'yinlardan iborat. Bu o'yinlar ishtirokchilarda aqliy, jismoniy ahloqiy, psixologik, estetik, badiiy, tadbirkorlik, mehnat va boshqa ko'nikmalarni rivojlantirishga yordam beradi. Ta'lim – tarbiya jarayonida asosan o'quvchilarda ta'lim olish motivlarini, ularning turli yo'nalishdagi qobiliyat va qiziqishlarini oshiradigan, biror kasbga moyilliklarini ko'rsatadigan didaktik o'yinlardan foydalaniladi. Didaktik o'yinlar nazariy, amaliy jismoniy, roli, ishchanlik va boshqa yo'nalishlar bo'yicha turlari bo'yicha ajratiladi.

Ko'pchilik o'yinlarda didaktik o'yinchoqlar va bunga bevosita a'loqador bo'lgan boshqa qo'llanmalar foydalaniladi. Didaktik o'yin jarayonida shunday holatlar ham tez-tez bo'lib turadiki bolalardagi eng yaxshi kayfiyat birdan sho'xlik, notinchlik va intizomsizlik bilan ham almashib qoladi. Bunday paytlarda o'qituvchi ayrim bolalarga tanbex berishga majbur bo'ladi va bu boshqarning o'yin kayfiyatini shubhasiz tushiradi. Agar shunday vaziyat sodir bo'lsa ham o'yin qoidasi bilan birga qo'shib tushuntirsa metodik jihatdan to'g'ri bo'ladi.

Individual didaktik o'yin o'qituvchi bilan o'quvchi o'rtasida bevosita munosabat yaratishga va bolalarning orqada qolishi sabablarini chuqurroq anglashga yordam beradi. Bunda o'qituvchining quyidagi kabi mantiqiy topishiriqli o'yin mashqlarini o'tkazishi maqsadga muvofiqdir. O'qituvchi yoki o'quvchilardan birontasi bir so'z aytadi, bolalar ana shu so'zga yaqin yoki qarama-qarshi ma'noli so'z topib aytadilar.

-O'yin qoidalarini, vazifalarini bolalarga ravshan va qiziqarli qilib tushuntirishi, ularda o'yinga bo'lgan qiziqishni oshirish hamda uni mashq bilan almashtirib yubormasligi;

O'yinni qiziqarli o'tkazishi kerak. O'yin paytida o'quvchilar har doim o'zlariga tanish bo'lgan manbaalarga asoslangan holda ish tutadilar, natijada bu material ularning xotirasiga yana ham mustakam o'rnatilib qoladi. O'yin elementlari bolalarni bilim saviyasini, nutqini, o'qishini o'stiradi.

A.S. Makarenko bola qanday o'ynasa ishni ham shunday bajaradi, deb juda to'g'ri ta'kidlaydi va o'yinni tarbiyaning muhim vositalaridan biri deb hisoblaydi.

Muhokama va natijalar: Yuqorida aytib o'tilganlar qatorida didaktik o'yinlar o'quvchilarda tahlil qilish, mantiqiy fikrlash, tadqiq qilish, hisoblash, o'lchash, yasash, sinash, kuzatish, solishtirish hulosa chiqarish, mustaqil qaror qabul qilish, guruh yoki jamoa tarkibida ishlash, ahloq odob o'rgatish, yangi bilimlar o'rgatish va boshqa faoliyat turlarini rivojlantirishga yo'naltirilgan o'yinlarga ajratiladi. Umumiy o'yinlar nazariyasiga, mavjud barcha o'yin turlarini tasniflashda ularni funksional, mavzuli konstruktiv, didaktik, sport va harbiy o'yinlariga ajratiladi. Bularning orasida ta'lim-tarbiya vazifalarini amalga oshirish imkoniyatini berishi alohida o'ringa ega. O'yinlar maktabgacha yoshdagi bolalarning asosiy faoliyat shakli hisoblanadi. Bu esa pedagog va psixolog olimlar tomonidan shu yosh davridagi o'yinlarning ta'lim-tarbiyaviy ahamiyatini o'rganish va yanada oshirish bo'yicha tadqiqotlar olib borilishiga asos bo'ldi. Natijada, oldingi asrning 60-yillari boshidan AQSH-da so'ngra boshqa g'arb mamlakatlarida ishchanlik o'yinlari qo'llanila boshlandi. Ishchanlik o'yinlari 123 tadqiqotchilari bu usulni eng asosiy, samarali va tejamli ta'lim metodlaridan iborat deb takidlaganlar. Didaktik o'yin texnologiyalari amalga oshiriladigan ayrim noananaviy dars shakllari ishchanlik o'yini darsi –dars mavzusi bo'yicha masalalarni hal etish jarayonida o'quvchilarning faol ishtirok etishini ta'minlash orqali yangi bilimlarni o'zlashtirish mashqi.

Integral (integratsiyalashgan) darsi - bir necha fanlarga oid integratsiyalash uchun qulay bo'lgan mavzular bo'yicha tashkil qilingan dars bo'lib,

o'quvchilarning turli fanlarga qiziqishlarini ortirib, ta'lim jarayonidagi faolliklarini ta'minlaydi. Bunday darslar o'quvchilarga fanlararo bog'liqlikni o'rgatish orqali ulardan olam tuzilishining ularning ilmiy asoslarini to'liq idrok etish, ilmiy dunyoqarashlarini shakllantirish, ijodiy tafakkurlarini rivojlantirishga xizmat qiladi. «Mo'jizalar maydoni» darsi – o'quvchilar bilan o'tkaziladigan qiziqarli o'yin bo'lib, turli savollarga belgilangan vaqt davomida to'g'ri javoblar topish va g'oliblarni rag'batlantirish orqali o'quvchilarda fikrlash, topqirlik, ziyraklik va bilimlarini kengaytirib borish sifatlarini shakllantiradi. Didaktiko'yinlarni amalda qo'llash shart-sharoitlari didaktik o'yinlarni tanlashda ishtirokchilarning yoshi, bilimi va tarbiyalanganlik darajasi hisobga olinadi.

Didaktik o'yin turlarini tanlash me'zonlari: - ishtirokchilar tarkibi bo'yicha o'g'il-bolalar, qiz-bolalar, qiz bolalar, o'smirlar katta yoshdagilar uchun o'yinlar; - ishtirokchilar soni bo'yicha –yakka, juftlikda kichik guruh, sinf jamoasi, raqobotdosh komandalar, sinflar aro va ommaviy o'yinlar; - o'yin jarayoni bo'yicha – fikrlash, o'ylash topog'onlik, harakatlar musobaqa va boshqalarga yo'naltirilgan yo'llar; - vaqt me'yori bo'yicha dars, mashg'ulot vaqtining reja bo'yicha ajratilgan qismi, o'yin maqsadiga erishguncha, g'olib yoki g'oliblar aniqlanguncha davom etadigan va boshqa o'yinlar.

Xulosa: Didaktik o'yinlardan amalda foydalanish orqali boshqa usullar yordamida erishish qiyin bo'lgan ta'lim –tarbiyaviy maqsadlarni amalga oshirish ko'zda tutiladi. Turli o'quv fanlariga oid didaktik o'yinlar mavjud bo'lib, ular shu fanlarni sifatli o'rgatish maqsadlariga xizmat qiladi.

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UNDERSTANDING INFLATION IN MACROECONOMICS: A PRACTICAL OVERVIEW

Abstract. Inflation, a key economic indicator, refers to the sustained increase in the general price level of goods and services over time. This article provides a practical overview of inflation in macroeconomics, focusing on its causes, effects, and measurement. It discusses various types of inflation, such as demand-pull and cost-push inflation, and their implications for the economy. The article also explores how inflation is measured using indexes like the Consumer Price Index (CPI) and the Producer Price Index (PPI). Additionally, it examines the role of inflation expectations and asset price inflation in shaping economic outcomes. Understanding inflation is crucial for policymakers, businesses, and individuals to make informed decisions in managing and navigating an inflationary environment.

Keywords: Inflation, Macroeconomics, Consumer Price Index (CPI), Producer Price Index (PPI), Demand-pull inflation, Cost-push inflation, Monetary policy, Economic indicators.

Introduction

Inflation, a term often heard in economic discussions, refers to the increase in the general price level of goods and services in an economy over a period of time. While some level of inflation is considered normal in a growing economy, excessive inflation can have detrimental effects. In this article, we will delve into the concept of inflation in macroeconomics, its causes, effects, and how it is measured, using practical examples to illustrate its impact.

[1] is a renowned textbook that covers various macroeconomic topics, including inflation. In this book, the authors provide an in-depth analysis of inflation, discussing its causes, effects, and implications for the economy. They explain how inflation is related to the overall level of prices in an economy and how it can be influenced by factors such as monetary policy, aggregate demand, and supply shocks. The book likely discusses different types of inflation, such as demand-pull and cost-push inflation, and their respective effects on the economy. Blanchard and Fischer probably also cover inflation measurement techniques, such as the Consumer Price Index (CPI) and the GDP deflator, to help readers understand how economists track inflation over time.

Additionally, the book may explore the role of inflation expectations in shaping economic behavior and how central banks use monetary policy to control inflation. Overall, «Lectures on Macroeconomics» likely provides a

comprehensive overview of inflation, making it a valuable resource for students, researchers, and policymakers studying macroeconomics.

«Mankiw's Macroeconomics» is another widely used textbook that covers various macroeconomic topics, including inflation. In this book, Mankiw provides a comprehensive overview of inflation, discussing its causes, effects, and measurement methods.

He likely explains the concept of inflation as a sustained increase in the general price level of goods and services in an economy over a period of time. Mankiw probably discusses how inflation can be caused by factors such as changes in aggregate demand and supply, as well as monetary factors like changes in the money supply [2].

Additionally, Mankiw likely covers different measures of inflation, such as the Consumer Price Index (CPI) and the Producer Price Index (PPI), and explains how these measures are calculated and used to track inflation over time. He may also discuss the implications of inflation for individuals, businesses, and the overall economy, including its impact on purchasing power, interest rates, and economic growth.

Overall, «Mankiw's Macroeconomics» is likely to provide a thorough and accessible overview of inflation, making it a valuable resource for students, researchers, and anyone interested in understanding this important economic concept.

Ball and Mankiw's paper, [4] in 1995, explores the relationship between relative-price changes and aggregate supply shocks, particularly in the context of inflation. The paper argues that changes in relative prices, which are often interpreted as demand shocks, can also be viewed as supply shocks that affect the overall price level in the economy. The authors present a model in which relative-price changes, such as an increase in the price of oil, can lead to changes in the overall price level through their effects on production costs and the aggregate supply of goods and services. They argue that these supply shocks can have significant effects on inflation, even in the absence of changes in aggregate demand.

The paper contributes to the understanding of inflation by highlighting the role of supply shocks in driving changes in the price level. It suggests that policymakers need to consider both demand and supply factors when formulating monetary policy to control inflation effectively.

Overall, Ball and Mankiw's paper provides valuable insights into the dynamics of inflation and the role of relative-price changes in shaping the overall price level in the economy.

Causes of Inflation:

Inflation can be caused by various factors, including:



1. Demand-Pull Inflation: This occurs when the aggregate demand for goods and services exceeds the economy's ability to produce them. For example, when consumer confidence is high, and people are spending more, it can lead to an increase in prices.



2. Cost-Push Inflation: This type of inflation occurs when the cost of production increases, leading producers to raise prices to maintain profit margins. For instance, an increase in the cost of raw materials or wages can lead to cost-push inflation.

3. Monetary Factors: Changes in the money supply can also lead to inflation. When there is an increase in the money supply in an economy without a corresponding increase in goods and services, it can lead to a decrease in the value of money, causing prices to rise.

Effects of Inflation:

Inflation can have several effects on an economy and its stakeholders:

1. Purchasing Power: Inflation erodes the purchasing power of money, meaning that the same amount of money buys fewer goods and services over time. For example, if inflation is 5% per year, a product that costs \$100 today will cost \$105 next year.

2. Interest Rates: Central banks often raise interest rates to control inflation. Higher interest rates make borrowing more expensive, which can dampen economic activity.

3. Income Redistribution: Inflation can lead to a redistribution of income and wealth. Debtors benefit from inflation, as they can repay their debts with money that is less valuable than when they borrowed it. On the other hand, savers and fixed-income earners may see a decrease in their real income.

Measuring Inflation: Methods and Key Indicators

Measuring inflation is essential for understanding the state of an economy and making informed policy decisions. There are several methods and key indicators used to measure inflation, each providing a different perspective on price changes in an economy.

1. **Consumer Price Index (CPI):**

The Consumer Price Index is one of the most commonly used measures of inflation. It tracks the changes in prices of a basket of goods and services that are typically purchased by households. The CPI is calculated by comparing the current cost of the basket of goods to the cost in a base year, and then expressing this as a percentage change.

2.	Producer Price Index (PPI):	The Producer Price Index measures the average change over time in the selling prices received by domestic producers for their output. It is often seen as a leading indicator of consumer inflation, as changes in producer prices can eventually be passed on to consumers.
3.	GDP Deflator:	The GDP deflator is a measure of the price level of all final goods and services produced in an economy. It is calculated by dividing nominal GDP by real GDP and multiplying by 100. The GDP deflator provides a broad measure of inflation across the entire economy.
4.	Personal Consumption Expenditures (PCE) Price Index	: The PCE Price Index is another measure of inflation that is based on the expenditures of households and includes a broader range of goods and services than the CPI. The Federal Reserve often uses the PCE Price Index to gauge inflationary pressures in the economy.
5.	Core Inflation:	Core inflation excludes volatile items such as food and energy prices, which can be subject to large fluctuations. Core inflation is often used to get a more stable and long-term view of inflation trends in an economy.
6.	Inflation Expectations:	Inflation expectations refer to the expectations that households, businesses, and investors have about future inflation. Expectations can influence actual inflation through their effects on wage and price-setting behavior.
7.	Asset Price Inflation:	Asset price inflation refers to the increase in the prices of assets such as stocks, real estate, and commodities. While not included in traditional inflation measures, asset price inflation can have significant effects on the economy.

Practical Example: Suppose the CPI in a country is 120 in the current year, compared to 100 in the base year. This means that prices have increased by 20% since the base year. If a basket of goods and services cost \$100 in the base year, it would cost \$120 in the current year.

Measuring inflation is crucial for policymakers, businesses, and individuals to understand the dynamics of price changes in an economy. By using a combination of measures and indicators, economists can gain a more comprehensive view of inflationary pressures and make informed decisions to manage them.

Practical Example: Let's consider a practical example of inflation using the CPI. Suppose the CPI in a country is 100 in the base year (year 0) and increases

to 110 in year 1. This means that prices have increased by 10% from the base year. If a basket of goods and services cost \$100 in the base year, it would cost \$110 in year 1.

Conclusion:

In conclusion, inflation is a complex economic phenomenon with significant implications for individuals, businesses, and policymakers. This article has provided a practical overview of inflation in macroeconomics, covering its causes, effects, and measurement methods.

We have seen that inflation can be caused by factors such as changes in aggregate demand, supply shocks, and monetary policy. Demand-pull inflation occurs when aggregate demand exceeds supply, leading to an increase in prices. On the other hand, cost-push inflation occurs when the cost of production increases, leading to higher prices.

Understanding how inflation is measured is also crucial. The Consumer Price Index (CPI), Producer Price Index (PPI), and GDP deflator are commonly used measures of inflation that provide insights into price changes in an economy.

Inflation has various effects on the economy, including reducing the purchasing power of money, influencing interest rates, and redistributing income. It is essential for policymakers to manage inflation effectively to maintain economic stability and promote growth.

Overall, a thorough understanding of inflation is essential for making informed decisions in both the public and private sectors. By understanding the causes and effects of inflation, individuals and businesses can better prepare for and navigate the challenges posed by inflationary environments.

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Jumayeva M.A.
teacher
Department of Theory of Preschool Education
Termiz State Pedagogical Institute

FORMING THE CREATIVE ACTIVITY OF 5-6-YEAR-OLD CHILDREN

Abstract. This article talks about the importance of forming the creative activity of preschool children in preschool educational organizations. The cognitive process of a preschool child develops in the process of creative activities.

Key words: preschool age, child, knowledge, creative, activities, research, creative activity, directed, planned, standard, criterion, environment, objects, knowledge, mastery.

Today, in our country, there are many problems in the development of creative qualities in children of preschool age, and many new laws and decrees are being adopted in our country to solve them. It aims to take into account the unique cooperation in order to develop moral qualities among all representatives of the social environment, peers, and family through creative images in preparatory groups for school and to find its reflection in the life of society. However, as a result of the changes in people's worldview and the demands of the times, there are problems regarding the provision of moral education to preschool children.

The cognitive process of a preschool child develops in the process of creative activities. In order for the child to search and show his creative activity in the process of completing the given task, the need for self-aware activity is felt, which is directed to a specific goal, planned, has standards and criteria. This is the child's assimilation of environmental objects and knowledge about them; creation of educational effectiveness requires reliance on previous types of activity.

In particular, the urgent problem of «how to educate preschool children's creativity?» has not arisen today. The issue of development of creative abilities in a person, which is the beginning of creativity from time immemorial, has been of interest to both pedagogues and researchers who are directly involved in the education of children. Education and training, the formation of a person in society, the development of abilities are still relevant issues. The problem of developing the technology of forming creative activity in preschool children is one of the multifaceted pedagogical-psychological social tasks, and it is one of the urgent tasks for the social development and progress of the society.

Creativity appears in various situations of activity. Curiosity, inspiration, aspiration, etc., include the process from the highest emergence of creativity in the human mind to its manifestation. A person's need for creative activity means

a desire for new, previously untargeted creativity in activity. In children of preschool age, any buds of creative activity cannot develop outside of education and activities.

In the process of education and upbringing, revealing the hidden talents of children, creating an opportunity for them to demonstrate their activities from preschool age, developing their creativity is the guarantee of raising competitive personnel with high potential, socially active, sharp mind, and ability to discover in the future. This corresponds to one of the priorities of our country - the idea of raising a well-rounded person. Formation of creative activity in children in preschool education is considered an important component of the educational process. Age and psychological characteristics of children, who are active and leading subjects of preschool education, as well as specific aspects of visual arts, work, music and physical education require a creative approach from the educator.

Of course, such innovations, aimed at updating preschool education both in form and content, require all pedagogues, starting from parents, to approach child education and his readiness for education based on the needs of the times. Processes in development centers organized in groups of pre-school education organization help children to constantly learn and consolidate new knowledge.

The main goal of development centers is to teach children to independently supplement their knowledge and to adequately adapt to the ongoing renewal processes. Development centers organized on the basis of the program provide children with the following content:

- acceptance and implementation of changes;
- critical thinking;
- make a choice;
- to communicate problems; - manifestation of creative, thinking and inventive possibilities;
- taking care of people, society, country, environment.

In the studies of many pedagogues and psychologists, scientific research was conducted on the problem of creativity and creativity. In particular, L. S. Vygotsky, B. M. Teplov, S. L. Rubinstein, V. I. Druzhinin, A. N. Leontiev, A. R. Luria, D. B. Bogoyavlensky, A. Ponomarev, N. F. Vishnyakova, A. A. Melik-Pashaeva, V. A. Kan-Kalika, K.V. Gavriloven V. V. Poznyakova and other foreign psychologists who conducted research on this problem: D. Veksler, J.V. Poznyakova and others. Guilford, R. Sternberg, G. Eyzenak, A. Tannenbaum, et al.

The analysis of psychological and pedagogical literature made it possible to define the concept of «creativity» as «one of the types of human activity aimed at solving a conflict (creative problem solving), for which objective (social, material) and subjective personal conditions (knowledge, skills, creativity) are required. It is known that B. M. Teplov understood certain individual psychological abilities that distinguish one person from another by abilities, they

are not reduced to the existing stock of skills and knowledge that a person has, but determine the ease and speed of their discovery.

There are enough psychological reasons to believe that every child contains the potential for creativity. In practice, some limitations must be overcome. First of all, it is impossible to convey, «broadcast» creativity as knowledge or skills. Second, true creativity in any field «creates a strong psychological dominant, covering the whole person» The task is to help the child get in touch with the position of the creator. By nature, children's creativity is synthetic and often improvisational. The synthesis of emotional sensitivity and thinking, logic and intuition, creative imagination and the ability to make quick decisions plays a leading role in musical creativity. The process of children's creativity awakens in children the desire to act sincerely and naturally. In conclusion, I would like to note that when I work in this direction, I am sure that performing creative work by children using various methods and methods, materials, original techniques, creative tasks will allow children to feel unforgettable positive emotions. I got Children open up great opportunities to express their fantasies, desires and themselves. In general, children are interested in creative research and solutions, children learn to work with different materials, children develop confidence in their abilities, and their artistic horizons are expanding.

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*Kalandarova F.T.
University of business and science
non-state higher education institution
Pedagogika va psixologiya kafedrasida o'qituvchisi*

KOMPETENTSIYAGA ASOSLANGAN YONDASHUV BO'LAJAK BOSHLANG'ICH SINFI O'QITUVCHILARINING DEONTOLOGIK KOMPETENTSIYALARINI SHAKLLANTIRISHNING NAZARIY ASOSI SIFATIDA

Annotatsiya. Mazkur maqolada bo'lajak boshlang'ich sinfi o'qituvchilarining deontologik kompetentligini rivojlantirishning nazariy asoslari keltirilgan. Maqolada boshlang'ich sinfi o'qituvchilarining deontologik kompetentligini shakllantirishga oid tavsiyalar ishlar chiqilgan. Pedagog olimlarning mulohazalari keltirilgan bo'lib, bu bo'lajak boshlang'ich sinfi o'qituvchilarining deontologik kompetentligini rivojlantirish masalalarini yoritishga alohida o'rin egallagan.

Tayanch so'zlar: kompetentlik, deontologik kompetentlik, maxoratli pedagog, kompetentsiya, pedagogik faoliyat, bo'lajak o'qituvchilar.

*Kalandarova F.T.
lecturer
Department of Pedagogy and Psychology
University of Business and Science non-state higher education institution*

COMPETENCE-BASED APPROACH IN THE FORMATION OF DEONTOLOGICAL COMPETENCIES OF FUTURE PRIMARY CLASS TEACHERS AS A THEORETICAL FRAMEWORK

Abstract. This article presents the theoretical foundations of the development of deontological competence of future primary school teachers. The article elaborates recommendations on the formation of deontological competence of primary school teachers. Pedagogical scientists' comments are presented, which has a special place in the discussion of issues of deontological competence development of future primary school teachers.

Key words: competence, deontological competence, skilled pedagogue, competence, pedagogical activity, future teachers.

KIRISH. Insoniyat asrlar mobaynida taraqqiyot qiyofasini o'zgartiradigan qator chuqur o'zgarishlarni boshdan kechirdi, bu birinchi galda sanoatlashgan jamiyatdan sanoatlashgan axborotga o'tish bilan bog'liq, bunda bilimlarning sintezi va ularning tarqalishi hal qiluvchi ahamiyatga ega bo'ladi, chunki ta'lim sohasi siyosat, iqtisodiyot, madaniyat va boshqa sohalar bilan yaqindan

uyg'unlashdi. Ayni paytda davrimizga xos ta'lim sohasidagi o'zgarishlar bo'lajak o'qituvchilarning raqobatbardoshligiga ko'maklashadigan yuksak madaniyat, tashabbuskorlik va mustaqil izlanishlariga yana ham yorqin yo'naltiradi. Keyingi yillar mobaynida ta'lim rivojlanishining asosiy yo'nalishlari o'zgardi, shu munosabat bilan bilimlar va qobiliyatlarni o'zlashtirish bilan bo'lajak o'qituvchining kasbiy pedagogik faoliyati va har doim malakalarning shakllanishini hal qilmaydi. Shu nuqtai nazardan kasbiy pedagogik ta'lim tizimiga kompetentli yondoshishni amalga oshirish bugungi kun talabi ekanligini e'tirof etish lozim. Shu nuqtai nazardan kompetentli yondoshish nazariyasi va amaliyoti eng jadal rivojlanayotgan yondoshish hisoblanadi, shu munosabat bilan uning «kompetentsiya», «kompetentli», «qobiliyat» kabi talqin qiladigan asosiy tushunchalarini ko'rib chiqish maqsadga muvofiq hisoblanadi. Bunda ta'kidlash kerakki, kompetentli yondoshish muammolari bilan shug'ullanadigan tadqiqotchilarning fikriga ko'ra, kompetentli yondoshishning tushunchalar doirasi to'la belgilab berilmagan hamda ularning bir xil va umume'tirof etilgan talqini yo'q. Kompetentli yondoshish g'oyalarini V.I. Baydenko, V.A. Bolotov, V.V. Serikov, E. F. Zeer, E. Simanyuk, I. A. Zimneya, D.A. Ivanov, K.G. Mitrofanov, O.V. Sokolova, O.E. Lebedev, G.K. Selevko, B.Abdullaeva, N.Ro'ziqulova, O.Qo'ysinov, J.Usarov, U.Raxmatov va boshqalarning ilmiy ishlarida ko'rib chiqilgan. Mazkur ishlarning aksariyatida kompetentli yondoshish mutaxassisning sifatleri va qobiliyatlariga jamiyat tomonidan yangi talablar paydo bo'lishiga javob sifatida qaraladi, zamonaviy maktab yoki boshqaruv strukturalari uchun kompetentli yondoshish g'oyalarini amalga oshirishga muhim ahamiyat beriladi. Kompetentli yondoshishdan foydalanish insoniyat taraqqiyoti nafaqat iqtisodiy o'sishga, ayni paytda shaxs rivojlangani darajasiga bog'liq ekanini tushunishga asoslanadi, bu «inson zaxiralari» tushunchasidan «inson kompetentligi» tushunchasiga o'tishni taqozo qiladi. Kompetentli yondoshishda ta'lim natijalariga asosiy e'tibor beriladi, bunda natija sifatida o'zlashtirilgan axborotlar hajmi emas, balki turli muammoli vaziyatlarda insonning yechim topa olish va hal qila olishiga qaraladi. Bizning holatimizda bu pedagogik hodisalar hisoblanadi, shuning uchun, bizningcha, faqat OO'Yuda o'quv jarayoniga pedagogik tus berish yo'li bilan, ya'ni talabalarga ta'lim berish va tarbiyalashning barcha bo'g'in va jihatlarini ularni kasbiy pedagogik tayyorlash vazifalariga bo'ysindirish orqali kompetentli yondoshishni amalga oshirish mumkin. Bu shuni anglatadiki, psixologik-pedagogik, balki boshqa fanlar ham talabalarni pedagogik faoliyatga yo'naltirgan tarzda o'qitilishi kerak. Ta'kidlash kerakki, kompetentli yondoshish ta'lim sohasidagi modernizatsiyalash muammolariga bag'ishlangan munozaralar munosabati bilan nisbatan yaqinda tarqalgan, natijada ilmiy-nazariy va ilmiy metodik tadqiqotlar paydo bo'ldi, ularda yondoshishning mohiyati, shuningdek hal qiluvchi kompetentliklarni shakllantirish jihatleri tahlil qilingan. Mazkur ishlarda kompetentli yondoshish ta'lim maqsadlarini belgilash, ta'lim jarayonini tashkil qilish mazmunini tanlash va quyidagi pozitsiyalardan natijalarini baholash printsiplari majmuidan iboratdir:

• to'plangan tajribadan foydalanish asosida turli faoliyat sohalari va shakllarida muammolarni mustaqil hal qilish qobiliyatini mutaxassisda rivojlantirish; • bilish, dunyoqarash, ahloq va boshqa muammolarni hal qilishga ko'maklashadigan didaktik moslashgan ijtimoiy tajribadan iborat ta'lim mazmunini tanlash; • ta'lim jarayonini tashkil qilish, bilish, kommunikativ, tashkiliy, texnologik, ahloq va boshqa muammolarni mustaqil hal qilish uchun sharoitlar yaratish; • muayyan ta'lim bosqichida erishilgan ta'lim natijalari, bilim darajalarini baholash. Kompetentli yondoshishning ko'plab g'oyalari mehnat bozoridagi vaziyatni o'rganish, xodimga nisbatan talablarni belgilash natijasida paydo bo'lgan. Bunda kompetentli yondoshish ta'lim mazmunini yangilashning muhim kontseptual qoidalardan biri sifatida qaraladi. Jahon ta'lim amaliyotini hisobga olganda e'tirof etish mumkinki, «asosiy kompetentliklar» tushunchasi bilimlar, qobiliyatlar va intellektual tarkibiy jihatlarni integrativ tabiatga ega o'ziga xos bog'lovchi, markaziy tushuncha hisoblanadi. Bo'lajak boshlang'ich sinfo'qituvchisining deontologik kompetentsiyasining negizi hisoblangan kasbiy tayyorligi, uning mohiyati, strukturasi oid aniq tasavvurlar yo'qligini hamda deontologik kompetentsiyani shakllantirishga doir ilmiy-asoslangan tavsiyalar o'rtasidagi nomutanosibliklarni ko'rib chiqish lozim. Xususan: • o'qituvchi faoliyatida deontologik kompetentsiyaning ahamiyati va oliy ta'lim tizimida uni shakllantirish mexanizmi to'la ishlab chiqilmaganligi; • Bo'lajak boshlang'ich sinfo'qituvchisiga deontologik qobiliyatlarni o'zlashtirish talablari va deontologik kompetentsiyani shakllantirishga ko'maklashadigan ta'lim modeli uzviy shakllanmaganligi; • va bo'lajak o'qituvchilarni tayyorlashda uning pedagogik shakllanishi shartlarini yechilmaganligi. Mazkur ziddiyatlarni hal qilish va bo'lajak boshlang'ich sinfo'qituvchisining kompetentligi shakllanishini ilmiy asoslangan modeli uzviy shakllanmaganligi tadqiqot muammosini belgilaydi, uning mohiyati bo'lajak boshlang'ich sinfo'qituvchisining deontologik kompetentsiyasini shakllantirish mazmuni va jarayonini ishlab chiqishdan iborat. Pedagogikada kompetentli yondoshishni amalga oshirishda predmet usti xususiyatiga ega muhim kompetentsiyalar va aniq o'quv predmetlarining o'zaro bog'liqligi maydonga chiqadi, ular doirasida faoliyatga tayyorlik, shuningdek kompetentsiyalar tarkibiga kiradigan universal qobiliyatlar shakllanadi. Bunda ta'lim mazmuni kompetentsiyalari va predmet strukturasi o'zaro bog'liqligi «muhim kompetentsiyalarini ajratib ko'rsatish; ularning mazmunini tahlil qilish hamda kompetentsiyalarni shakllantirish uchun zarur bilimlar va aniq predmet qobiliyatlarini belgilash; ta'limni aniq o'quv predmeti bo'yicha tashkil qilish»ni nazarda tutadi. Kompetentli yondoshish o'z navbatida shuning uchun ham zarurki, hozirgi jiddiy modernizatsiya va isloh qilish sharoitidagi zamonaviy ta'lim ziddiyatlarning bir necha guruhlarini hal qilishga yo'naltirilgan innovatsion pedagogik g'oyalar va kontseptsiyalarni joriy qilishni talab qiladi, ular orasida quyidagilar: • kompetentli yondoshishning boshlang'ich amaliy yo'nalganligining pedagogik amaliyotning mavjud predmet (shu jumladan meta predmet) yo'nalishiga mos kelmasligi; • kontseptual va innovatsiya

potentsialining noaniqligi, xususan faoliyatli va rivojlanadigan yo'nalishdagi mavjud psixologik-pedagogik kontseptsiyalar bilan innovatsiya potentsiali jiddiy farqining mavhumligi (N.D. Nikandrov, M.V. Boguslavskiy, V.M. Polonskiy); • kompetentli yondoshishning predmet va yosh bilan bog'liq jihatlariga (G.N. Filonov), shuningdek uni joriy qilishning tashkiliy-boshqaruv jihatlariga yo'qligi (N.D. Nikandrov, I.I. Logvinov); • kompetentli yondoshish asosida amalga oshiriladigan milliy madaniy, ijtimoiy-siyosiy, nihoyat ijtimoiy-psixologik standartlar ishlab chiqish kontekstining noaniqligi (V.I. Slobodchikov, T.M. Kovaleva). Biroq kompetentli yondoshishni amalga oshirishda quyidagi ikki jihat oldingidek muhim bo'lib qolaveradi: • birinchidan, kompetentli yondoshish kontseptsiya va mantiq amaliyotiga nisbatan, biroq tegishli fanlar tushuncha va metodologik apparatiga tayanish yoki ulardan olishni nazarda tutadigan ko'plab zamonaviy yondoshishlarning zamonaviy, shu jumladan kulturologik (V.V. Kraevskiy va boshqalar), ilmiy ta'lim (S.A. Piyavskiy va boshqalar), didaktomarkazlashgan (N.F. Vinogradova va boshqalar), funksional-kommunikativ (V.I. Kapinos va boshqalar) yondoshish sifatida qaraladi; • ikkinchidan, eng ahamiyatli holat, buning natijasida ta'limda kasbga o'qitish dolzarb tus oldi.

XULOSA Deontologik kompetentli yondoshishni xarakterlaydigan asosiy tushunchalar tahlili quyidagi tushunchalarni ajratib ko'rsatish imkonini beradi: • muayyan predmetlar va jarayonlar doirasiga nisbatan ajratiladigan o'zaro bog'liq shaxs xususiyatlari majmuini o'z ichiga oladigan kompetentsiyani; • tegishli kompetentsiyani, shu jumladan unga va faoliyat predmetiga shaxsiy munosabatlarni egallash, o'zlashtirish bilan nisbat beriladigan kompetentlikni. Kompetentlik, kompetentsiyalarni shakllantirish bosqichma-bosqich amalga oshiriladi, buning uchun birinchi bosqichda elementar o'quv kompetentsiyalar shakllantiriladi: o'qilgan yoki eshitilgan bilimning asosiy mazmunini olish; berilgan savol yoki mavzuga binoan fikrlarni aniq shakllantirish, o'ziga xos fikrlarni birga keltirish; vazifalarni hal qilishning turli variantlarini tadqiq qilish, turli mezonlar nuqtai nazaridan eng yaxshisini tanlash; umumiy vazifani bajarishda boshqalar bilan hamkorlik; harakatlar va vaqtni rejalashtirish; o'z faoliyati natijalarini baholash va boshqalar. Binobarin, kompetentli yondoshishni amalga oshirishning asosiy maqsadi pedagogik texnologiyalardan foydalanish asosida ta'lim jarayonini rekonstruktsiya qilish hisoblanadi. Ular o'quv bilish jarayoni shakllanishi (ish maqsadlari va tartibini belgilash, o'quv faoliyatini mustaqil rejalashtirish, alohida ob'ektlar o'rtasida aloqa o'rnatish, yangi vaziyatlarda o'zlashtirilgan usullarni qo'llash, o'zini nazorat qilish), kommunikativ (hamkorlik, bolalarga yordam ko'rsatish, guruh ishida qatnashish, axborotlar almashish va boshqalar), axborot (axborotni mustaqil izlash, tahlil qilish va tanlash, strukturalash, o'zgartirish, saqlash, uzatish va boshqalar), o'zini shaxsiy takomillashtirish (yutuqlar va xatolarni tahlil qilish, muammolar va qiyinchiliklarni topish, og'ir vaziyatlarda o'zaro yordam va qo'llab-quvvatlash va boshqa) kompetentsiyalarni shakllantirish vazifalarini hal qilish imkonini beradi.

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*Karimov N.
Andijon qishloq xo'jaligi va agrotexnologiyalar instituti
Gumanitar fanlar kafedrasida assistenti*

HADIS VA HIKMATLARDAN TARBIYA JARAYONIDA FOYDALANISH VA ULARNING TA'LIM JARAYONIDA QO'LLANILISHI

Annotatsiya. Hadis ilmining paydo bo'lishini Payg'ambar alayhissalomning vafotidan bir asr o'tgandan keyin bilan bog'lash to'g'ri bo'ladi. Chunonchi Payg'ambar hayot vaqtlarida uning so'zlari-yu, qilgan ishlarini avval boshda faqat eshitish va mushohada qilish bilan chegaralangan bo'lsa, so'ngroq ularni naql etib rivoyat qilina boshlandi. Bu insonlarning ma'naviy olami uchun katta oзуq bo'ldi. Payg'ambardan hadis eshitgan sahobalar ham har xil sharoitda bo'lganlar-qay birlari ko'proq, boshqalari kamroq eshitganlar. Bu hol esa naql va rivoyatga ehtiyojning oshishiga sabab bo'lgan.

Kalit so'zlar: islom dini, payg'ambarlar, hadis, hadisshunoslik, sahobalar, tobeinlar, roviy, sanad, musnad.

*Karimov N.
assistant
Department of Humanities
Andijan Institute of Agriculture and Agrotechnologies*

THE USE OF HADITHS AND WISDOM IN THE EDUCATIONAL PROCESS AND THEIR APPLICATION IN THE EDUCATIONAL PROCESS

Annotation. It would be correct to associate the emergence of the science of Hadith with a century after the death of the Prophet. And when the Prophet chunun (peace be upon him) said to him during his lifetime, what he had done was first limited to hearing and observing only in the head, then it began to be narrated to narrate them. This has become a great weight for the spiritual world of people. The companions who heard hadith from the prophet were also in different conditions-which one heard more and the other less. This was the reason for the increased need for narration and narration.

Keywords: Islam, prophets, Hadith, Hadith studies, sahabas, tobeins, roviy, sanad, musnad.

Kirish. Payg'ambar alayhissalom vafotlaridan keyin, sahobalar islom diniga kirgan yangi-yangi mamlatlarga kengayib, yoyilib ketgach, Payg'ambar hadislarini bilishga bo'lgan ishtiyoq va zarurat tobora osha boshlagan. Yillar o'tishi bilan bu ehtiyoj brogan sari kuchayib xilma-xil shar'iy ahkomlarni bilish

va Qur'oni karim mazmunlarini ma'nan idrok etib chuqur anglashga ehtiyoj kuchayadi. Mana shu sabablarga ko'ra hadislarni izlab topish, ularni aniqlash talabida turli o'lkalarga har xil safarlar va rihlatlar ko'payadi. Vaqt o'ta borishi bilan hadis roviylarining bisyorligidan ularni aniq bilish, sanadini tekshirib ko'rish, ular o'rtasidagi tafovut va farqlarning qaysinisi to'g'riligiga ishonch hosil qilish kabi birqator masala va bahsli holatlar paydo bo'ldiki, bularni o'rganadigan maxsus ilm-- hadis ilmlari vujudga keldi. Hadis ilmining barcha uchun tushunarli va ravon bo'lishi biroz qiyinroq bo'lganligi uchun, hamma ham uni birdek tushunib, to'g'ri qabul qilishga qiynalgan holatlar ko'paygani bois,

--**Mavzuga oid adabiyotlar tahlili (Literatura review).** Muhammad (s.a.v) vafotidan keyin uning so'zlari og'zaki tarzda yetkazilgan. Islom an'analariga ko'ra, ikkinchi xalifa Umar ibn al-Xattob barcha hadislarni bir jildga jamlash ishlarini boshlagan, ammo „Qur'on musulmonlar tomonidan e'tiborsiz qolishidan qo'rqib» bu harakatdan voz kechgan (Muhammad (s.a.v) so'zlariga ko'ra). Zubayr Siddiqiy).

Umaviylar xalifasi Umar ibn Abdulaziz (umar II, milodiy 717-720 yillarda hukmronlik qilgan) ham barcha hadislarni to'plashga harakat qila boshladi. Hadislarni o'rgatish va to'plash uning musulmon jamiyatining ma'naviy hayotini yangilash rejasining bir qismi edi. U fiqh o'qituvchilarini qo'llab-quvvatlagan, badaviy qabilalariga o'qituvchilar yuborgan, Hijozda haftalik hadis ma'ruzalarini buyurgan, Misr va Shimoliy Afrikaga hadis olimlarini yuborgan (Muhammad Zubayr Siddiqiyga ko'ra).

Umar (r.a) Madinaning buyuk olimi Abu Bakr ibn Hazmga Umar ibn al-Xattobning barcha hadislarini, xususan, Oisha roziallohu anho rivoyat qilgan hadislarni yozishni buyurdi. U bu hadislarni Umaviylar imperiyasi bo'ylab tarqalgan kitoblarda to'plagan. Garchi bu kitoblar bugungi kunda yo'qolgan bo'lsa-da, Ibn an-Nadimning sharhlari ularning fiqh kitoblari, masalan Imom Molikning Muvattosi, birinchi yirik hadislar to'plami tuzilganligini ko'rsatadi. Imom Molikning o'zi, ehtimol, Umar (r.a) buyurgan ilk hadis kitoblardan birinchisini yozgandir.

Hadisshunoslikda sahih bo'lmagan hadislarning ko'payishi sodir bo'lganidan keyin eng mashhur hadis to'plovchisi va «ilm al-hadis» amaliyotchisi Muhammad al-Buxoriy tomonidan 16 yoshdan kattaroq vaqtida 600 000 ga yaqin yig'ilgan hadislar tufayli rivojlandi. Hadis ilmining taraqqiyot bosqichlari haqida to'xtalsak, quyidagilarni qayd qilish lozim bo'ladi.⁴¹

-- **Tadqiqot metodologiyasi (Research methodology).**

1. Payg'ambar alayhissalom davrida hadis ilmi. Bu davrdagi hadis ilmi, yuqorida qayd etilganidek, sahobalarni Payg'ambardan eshitgan hadislar va uning holatlarini mushohada etganlari bilan belgilanadi. Keyin ular (sahobalar) g'oyib bo'lganlarga u hadislarni yetkazganlar. Shu boisdan ham bu dastlabki

⁴¹ https://uz.wikipedia.org/wiki/Hadis_ilm

bosqichda hadis ilmi rivoyat, yodda saqlash (hifz) va g'oyiblariga yetkazish kabi xususiyatlarga ega bo'lgan.

2. **Sahobalar davrida hadis ilmi.** Bu davr, asosan Payg'ambar vafotlaridan keyin boshlanadi, chunonchi shu paytdan boshlab hadis rivoyat qilishga alohida talab paydo bo'ladi va avvalroq zikr qilganimizdek, shu maqsad yo'lida boshqa shahar va mamlakatlarga safarlar ham boshlanadi. Ayni vaqtda sahobalar katta e'tibor bilan rivoyat qilinadigan hadislarga biror xato voqe' bo'lishdan ham ogoh bo'la boshladilar. Chunonchi bu xususda Payg'ambar alayhissalomning **»kimki menga nisbatan yolg'onni so'zlasa, shubhasiz u jahannamdan joy oladi»**, degan ochiq-oydin hadislar ham bor edi. Darvoqe rivoyatning to'g'ri (haqiqat) ekanligi, uning shartlari, xillari, ahkomlari, roviylarning holatlariyu sharoitlariga doir hadis ilmidagi turli-tuman masalalarni tadqiq qiladigan maxsus soha bo'lib, uni **ilm ud-diroya** deb ataladi.

Tahlil va natijalar (Analysis and results). Anashu paytdan e'tiboran roviylarning rivoyatlarini aniqligi, ular Payg'ambarni ko'rganlari yoki undan bevosita eshitganligi haqida shohidlarni talab qilish, bu haqda hatto qasam ichirish kabi masalalar ko'tarila boshladi. Bunga qo'shimcha rivoyat qilinadigan hadisning matnini tadqiq etishga ham alohida e'tibor berildi. Bu hol keyinchalik hadisshunoslikda matnni tanqidiy (ilmiy) tarzda o'rganish (ya'ni **naqd al-matn**) deb ataladi. Mazkur holatlarda matnni aniqlashda islom dini asoslari-Qur'oni karim oyatlari yoki boshqa shu mavzuga dahldor hadislarga asoslanib, yetarli dalil va isbotlarga tayangan holda xulosa chiqarilardi. Mana shu jarayonda sahobalar Payg'ambar alayhissalomdan hadislar rivoyat qilishlik naqadar katta mas'uliyatni va ayni vaqtda g'oyatda muhim va hatarli ekanligini angladilar. Chunki hadislarni ishonchli, to'g'ri rivoyat qilmay uni xato yoki yolg'on, noto'g'ri holda keltirilishi jamiyat uchun muhimligi ayon bo'ldi. Halol va harom tushunchalari, hamda boshqa shar'iy ahkomlarni to'g'ri talqin qilish uchun endi sanad zarurati ham tug'ildi. Bunga ayniqsa, musulmonlar orasida har xil siyosiy fitnalar va mojarolar paydo bo'la boshlagach, tobora ehtiyoj kuchaya boshladi. Bu masalani aniqlash uchun boshqa shaharlarga borishlar ham avj olaboshladi. Hatto bitta hadisni aniq bilish uchun qanchadan-qancha masofa, cho'li-biyobonlarni bosib o'tishga to'g'ri keladi. Masalan, Payg'ambar alayhissalomning suhbatida necha martalar bo'lib undan ko'pdan-ko'p hadislar eshitgan Abu Ayub al-Ansoriy Madinai Munavvaradan atigi bitta hadis eshitish uchun Misrga, Aqaba ibn Omir huzuriga borgan va o'sha hadisni eshitgach, yana uloviga minib o'z shahri Madinaga qaytib kelgan. Hijriy ikkinchi asrdan boshlab, sahobalar davri tugab hadislarni ham matn, ham sanad jihatidan chuqur o'rganib tadqiq etishga ehtiyoj yanada kuchaydi. Bu masala ayniqsa islom olamida turli-tuman firqalar (guruhlar) va mazhablar paydo bo'lgandan keyin yanada katta ahamiyat kasb etdi. Shu maqsadda hadisshunoslikda jarh va ta'diy ilmi paydo bo'lib, u roviylarning holatlarini tadqiq etib ular aytganlarini qabul qilish yoki rad etishni o'rganardi. Hadis roviylarining tarixlari va ularning to'liq tarjimai hollarini o'rganish bilan

shug'ullanadigan olimlar paydo bo'lib, bu sohada alohida asarlar yarata boshladilar.⁴²

Hadislar Qur'oni karimdagi oyatlarni tushuntiradi, sharoitga tatbiq etadi. Shunga ko'ra ular o'z ahamiyati jihatidan Qur'oni karimdan keyingi eng muhim qo'llanmalardir. Hadislarni yig'ish payg'ambarimiz davrlaridan boshlangan. Lekin vaqt o'tishi bilan ularni saralash, ishonchlilarini ishonchsizlaridan ajratib olish qiyinlashib borgan. Islomni obro'sizlantirish, musulmonlarni chalg'itish uchun uning dushmanlari soxta hadislar to'qib tarqatganlar. Shuning uchun bu hadislarning kim tomonidan aytilganligiga va ularning shaxsiga alohida e'tibor berilgan. Hadisshunoslik degan fan hadislarning «sahih» (ishonchli)larini «nosahih» (ishonchsiz)laridan ajratish bilan shug'ullangan. Payg'ambarimiz so'zlari – hadislar roviylardan yig'ilgan. «Roviy» ma'lumot beruvchi, aytuvchidir. Roviylar, asosan, ikki xil bo'lgan: sahobalar, tobeinlar. Sahoba deb payg'ambarimizni ko'rgan va u kishi bilan suhbatda bo'lgan izdoshlariga aytilgan. Tobeinlar esa payg'ambarimizni emas, sahobalarni ko'rib, ulardan eshitganlarini aytuvchilardir. Hadis ikki qismdan – sanad va matndan tashkil topgan. Sanad – payg'ambarimiz so'zlarining qachon, qanday sharoitda, kimlar huzurida aytilganligi hujjati bo'lsa, matn uning mazmunidir. Imom Buxoriy mana shunday hadis ilmining Buxorodan yetishib chiqqan va butun dunyoga shuhrat taratgan allomasi edi. U kishining hayot yo'llari ham ibratlidir.⁴³ Talabalarda Yassaviy hikmatlarini o'rganish orqali bir-biriga mehr- muhabbat, muruvvat va oqibat, saxiylik, saxovat diyonat, qanoat, himmat, adolat, sabr- toqat, mehribonlik, rostgo'ylik fahm - farosatlilik, ziyraklik kabi ma'naviy-axloqiy sifatlar rivojlanib borganligiga guvoh bo'ldik. Yassaviy yoshlarga murojaat qilib, bilim egallash oson emasligini, buning uchun esa yillar davomida har qanday qiyinchiligu mashaqqatlarga qaramasdan tinmay izlanish va o'z ustida qunt bilan ishlash kishidan irodali bo'lishni talab qiladi. Shunday xulqqa ega bo'lgan Shaxsgina bilim va fan chmqqilarini yillar davomida egallab olishini ta'kidlaydi.⁴⁴

--Xulosa va takliflar (Conclusion/ Recommendations) Xulosa qilib aytganda, ta'lim-tarbiya jarayonida, o'tilayotgan mavzularga mos bo'lgan hikmatli so'z, aforizmlar va hadislardan foydalanish yaxshi samara beradi. deya ko'rsatiladi. Hadislar tarbiya manbai hisoblanadi. Hadislarni eshitib, tanishish, ko'rish, yodlash, mazmunini anglash, o'rganish orqali hayotimizda hadislardan ibrat olgan holda, ularni amalda hayotimizda qo'llab, ko'p o'zimizni tarbiyamizdagi kamchiliklarni tuzatishimizga yordam beradi. Undan tashqari o'z ona Vatanimizga muhabbat, mehnat va kasb-hunarni ulug'lash, halollik, poklik, do'stlik, oliyjanoblik, rahmshafqatlilik, kamtarlik, rostgo'ylik va vijdonlilik kabi

⁴² <http://www.fikr-uz.narod.ru/b/11.html>

⁴³ 5-sinf adabiyot. S. Ahmedov, B. Qosimov, R. Qo'chqorov, Sh. Rizayev, «Sharq» nashriyot-matbaa aksiyadorlik kompaniyasi bosh tahririyati Toshkent – 2015

⁴⁴ Sayyora Muxammadiyeva. Ahmad Yassaviyning ta'limiy axloqiy qarashlaridan yosh avlod tarbiyasi. "Oriental Art and Culture" Scientific-Methodical Journal / ISSN 2181-063X Volume 4 Issue 2 / April 2023

xislatlar kiritiladi. Bundan tashqari, insonning o'zini yomon illatlardan tiyishi, yaxshilik sari intilishi kerakligi borasidagi pand-nasihatlar ham o'z aksini topganki, bularning barchasi Qur'oni Karimda qayd etilgan ko'rsatmalarga asoslanilgan va komil insonni shakllantirishda asosiy mezon bo'lib xizmat qiladi.⁴⁵

Foydalanilgan adabiyotlar ro'yxati:

1. https://uz.wikipedia.org/wiki/Hadis_ilm
2. <http://www.fikr-uz.narod.ru/b/11.html>
3. 5-sinf adabiyot. S. Ahmedov, B. Qosimov, R. Qo'chqorov, Sh. Rizayev, «Sharq» nashriyot-matbaa aksiyadorlik kompaniyasi bosh tahririyati Toshkent – 2015
4. file:///C:/Users/Windows/Downloads/5200

⁴⁵

file:///C:/Users/Windows/Downloads/5200
%D0%A2%D0%B5%D0%BA%D1%81%D1%82%20%D1%81%D1%82%D0%B0%D1%82%D1%8C%D0%
B8-12804-1-10-20220224%20(1).pdf

*Karimov Q.M.
Qarshi davlat universiteti
Algoritmlar va dasturlash texnologiyalari
kafedrasi professor vazifasini bajaruvchi
Sherboyev Q.X.
Qarshi davlat universiteti
Matematika va informatika ta'lim yo'nalishi talabasi*

UMUMIY O'RTA TA'LIM MAKTABLARIDA INFORMATIKA VA AXBOROT TEXNOLOGIYALARI FANI BO'YICHA DARSNI ELEKTRON MATERIALLAR ASOSIDA TASHKIL ETISH

Annotatsiya. Ushbu maqolada bo'lajak informatika o'qituvchilarni tayyorlashda axborot-ta'lim muhitlaridan foydalanish algoritmi va ushbu muhitdan foydalanish metodikasi, uning samaradorlik darajasi keltirilgan, shuningdek umumiy o'rta ta'lim maktablarida informatika va axborot texnologiyalari fani bo'yicha darsni elektron materiallar asosida tashkil etish masalasi ko'rib chiqilgan.

Kalit so'zlar: informatika, axborot-ta'lim muhiti, algoritmi, Internet.

*Karimov Q.M.
acting professor
Department of Algorithms and Programming Technologies
Karshi State University
Sherboyev K.X.
Student of mathematics and informatics
Karshi State University*

USE OF ELECTRONIC RESOURCES IN TEACHING INFORMATICS SCIENCE

Abstract. This article presents the algorithm of using information-educational environments in the training of future informatics teachers, the methodology of using this environment, and its level of effectiveness.

Key words: informatics, information-educational environment, algorithm, Internet.

Axborot texnologiyalari sohasi jadal sur'atlar bilan rivojlanib, takomillashib borayotgan bugungi kunda ta'limni axborot-ta'lim muhiti asosida tashkil etish, uning mazmunini ta'lim oluvchilar ongiga to'laqonli singdirish dolzarb muammo sifatida ko'tarilmoqda. Zamonaviy axborot-ta'lim muhitida o'qitishning muammoli usuli axborotretseptiv va reproduktiv metodlari bilan birgalikda keng qo'llaniladi. Bu muhitda onlayn tartibda ta'lim mazmunini

taqdim etish, ta'lim oluvchining bilish faoliyatini boshqarish va nazorat qilish vositalari sifatida foydalaniladi.

Foydalanuvchi nuqtai nazaridan tahlil qiladigan bo'lsak, axborot-ta'lim muhitining birinchi navbatda, tarmoq mijozlariga o'zaro ma'lumotlar almashish, hamda virtual muloqot qilish imkonini yaratib beruvchi axborot magistrali vazifasini o'taydi. Natijada, axborot-ta'lim muhitining tizimidan foydalanish jarayoni uchun interaktiv muloqot yuzaga keladi. Bunda ta'lim beruvchi va ta'lim oluvchi bir-biri bilan bog'liq faoliyatni, differentsiallashtirish tamoyillarini, ularning individualligini hisobga olgan holda inson va texnik imkoniyatlarni optimal amalga oshirishni hamda muloqotdan foydalanishni nazarda tutadi.

Axborot-ta'lim muhitining imkoniyatlari an'anaviy qog'oz asosidagi imkoniyatlardan ancha yuqori, chunki keng ko'lamdagi ta'lim dasturlarini o'zlashtirish va amalga oshirishni ta'minlovchi o'quv reja, fan yoki o'quv kursi bo'yicha dasturlar, uslubiy qo'llanmalar, elektron darsliklar, video lavhalar, taqdimotlar, mustaqil bajarish uchun topshiriqlar, uyga vazifalar, o'rgatuvchi dasturlar, elektron trenajyorlar, o'z-o'zini baholovchi savollar, testlar, fan yoki o'quv kursini o'rganish hamda nazorat ishlarini bajarish bo'yicha uslubiy tavsiyalarni qamrab olgan, Internet tarmog'idagi web-sayt yoki web-portalga joylashtirilgan, tizimlashtirilgan nazariyamaliy resurs hisoblanadi. Shu bois bugungi ta'lim tizimi uchun yangi zamonaviy axborot-ta'lim muhitlarni joriy etish ta'lim muassasalarining asosiy vazifalaridan biri bo'lib, respublikamizning barcha ta'lim muassasalarida Internet tarmog'i orqali axborot-ta'lim muhitlaridan foydalanish joriy etilgan. Ammo ularni o'quv jarayoniga joriy etish bo'yicha qator savollar ochiq qolmoqda.

Xo'sh, bugungi kundagi ta'lim muassasalarining o'quv jarayonida axborot-ta'lim muhitining foydalangan holda ta'limni tashkil etishning ahvoli qanday, bu sohadagi yutuq va kamchiliklar nimalardan iborat, o'z yechimini kutayotgan qanday muammolar mavjud?

Adabiyotlarning tahlili. Zamonaviy axborot-ta'lim muhitining ta'lim tizimida qo'llanishi tushunchalarni ham mazmunan, ham mohiyatan qayta ko'rib chiqishni taqozo etdi. Shu bois, ta'lim va o'qitish jarayonlariga yangicha yondashuvga e'tibor bilan qarala boshlandi. Ta'lim jarayoni deyilganda professor-o'qituvchi va talabaning o'zaro munosabatidagi yaxlit jarayon ko'z oldimizga keladi. Endilikda ushbu jarayon interaktiv o'quv majmualar, video va audio ma'ruzalar, kompyuter dasturlari, televizion va radio o'quv kurslari bilan uyg'unlashib bormoqda. Bu jarayonda o'qitish talabaning ko'proq ichki imkoniyatlari, intellektual potentsiali, axborotni qabul qilish va o'zlashtirish xususiyatlariga bevosita bog'liq. Ta'lim tizimida axborot-ta'lim muhitidan foydalanish muammolari, ta'limni axborotlashtirish nazariyasi, metodologiyasi, amaliyoti bo'yicha Mustaqil Davlatlar Hamdo'stligi va respublikamiz olimlari tomonidan ko'plab tadqiqotlar olib borilgan. Jumladan, A.A.Andreev, O.E.Belova, A.V.Baraulina, N.A.Goncharova, Ye.N.Dronova, V.A.Krasilnikova, A.L.Nazarenko, L.F.Solovev, A.A.Abduqodirov, U.Sh.Begimqulov,

M.H.Lutfillaev, F.R.Murodova, N.I.Taylakov, B.Z.To'raev, O.A.Tarabrin, T.T.Shoymardonov kabi olimlar tomonidan ilmiy-tadqiqot ishlari olib borilgan. Ushbu olimlarning ilmiy-tadqiqot ishlarida bo'lajak informatika o'qituvchilarni tayyorlashda axborot-ta'lim muhitidan foydalanish metodikasiga oid izlanishlar yetarlicha tadqiq etilmagan.

N.I.Taylaqov bugungi kunda elektron ta'limni joriy etishda quyidagi turkum muammolar mavjudligi haqida fikr yuritilgan

elektron ta'limni joriy etishga pedagogik jamoalarning yetarli darajada tayyor emasligi;

fan o'qituvchilarining elektron ta'lim imkoniyatlari haqidagi tasavvurlarining kamligi, ularni qo'llash bo'yicha salohiyatning yetishmasligi;

elektron ta'limni joriy etish bo'yicha mutaxassislarni yetarli darajada emasligi.

U.Sh.Begimqulov [3] ta'lim tizimida axborot-ta'lim muhitini tashkil etish o'quv-tarbiya jarayonlarining barcha bosqichlarini jadallashtirish, bunda axborot texnologiyalaridan foydalanish asosida ta'lim jarayoni sifati va samaradorligi oshishini, talabalarning bilish faoliyatlari intensivlashuvi, fanlararo aloqadorlikning chuqurlashuvi kuzatilishini haqida fikr yuritilgan bo'lsa, A.V.Baraulina [2] darslarda - ta'lim muhitidan foydalanilsa, quyidagi imkoniyatlarga erishish mumkinligi haqida fikr yuritgan: ta'limda ijobiy motivatsiyani ta'minlaydi; darslarni yuqori estetik va emotsional bosqichlarda olib borishni ta'minlaydi; differensiallashning yuqori bosqichlarini ta'minlaydi (yakka tartibda shug'ullanish); darsda bajarilgan ish hajmini 1,5-2 barobarga oshiradi; bilimlarni nazorat qilishni takomillashtiradi; fazoviy tasavvurlarni rivojlantiradi; o'quv jarayonini ratsional tashkillashtiradi hamda, dars samaradorligini oshiradi; tadqiqotchilik faoliyati ko'nikmalarini shakllantiradi; turli ma'lumotli tizimlar, elektron kutubxonalar kabi axborot resurslardan foydalanishga oid ko'nikmasi shakllanadi.

Ye.N.Dronova axborot-ta'lim muhitlaridan onlayn tarzda taqdim etilishi ta'lim oluvchining ushbu fanga bo'lgan qiziqishini orttirishi haqida fikr yuritgan.

Mazkur ijobiy yutuqlarni amalga oshirishda axborot-ta'lim muhitining o'quv mashg'ulotlarning tashkil etuvchilari video ma'ruza, o'rgatuvchi dasturlardan, o'z-o'zini baholovchi va nazorat qiluvchi diagnostik aparat dasturiy vositalardan hamda mustaqil bajarish uchun masalalar, laboratoriy ishlaridan iborat bo'lishi lozim.

Ushbu olimlarning fikrlarini tahliliga ko'ra, axborot-ta'lim muhitidan anaviy hamda masofaviy ta'lim o'quv-metodik ta'minotining samarali integratsiyasini ta'minlashi, talabalarga mustaqil izlanish yo'li bilan materiallarni topish, o'rganish hamda muammoli masalalarni hal etish orqali ularda ma'lum tadqiqot ishlarini amalga oshirish ko'nikmalarini shakllantirishi, talabalarning kurs, malakaviy bitiruv ishlarini bajarishda, magistrlik dissertatsiyalarini tayyorlashda o'quv materiallari bilan mustaqil tanishish, tanlab olish, axborot

hamda ma'lumotlarni tahlil eta olish kabi malakalarni shakllanishi uchun sharoit yaratishga oid didaktik vazifalarni ham amalga oshiradi.

Tadqiqot metodologiyasi. Bugungi kunda axborot-ta'lim muhiti orqali ta'lim berish Amerika, Germaniya, Buyuk Britaniya, Yaponiya, Xitoy, Janubiy Koriya va Rossiya davlatlarida keng tarqalgan bo'lib, XXI asr oxirida axborot-ta'lim muhiti orqali ta'lim berish, butun dunyoni qamrab olishi kutilmoqda. Bu borada AQShning Pensilvaniya davlat universiteti masofaviy ta'lim markazi (worldcampus.psu.edu), Kaliforniya virtual universiteti (cvc.edu), Vashington ochiq universiteti (gwu.edu), G'arbiy gubernatorlari universiteti (umuc.edu), Minnesota virtual universiteti (careerwise.mnscu.edu), Florida masofaviy ta'lim universitet (fcd.ufl.edu)lar o'z hissasini qo'shib kelmoqda.

Bugungi kunda Buyuk Britaniya (open.ac.uk) ochiq universitetida 2 milliondan ortiq talaba tahsil oladi, ushbu universitetning 305 ta hududiy va 42 ta boshqa davlatlarda markazlari mavjud. Universitetning 250 ta markazida aniq va tabiiy fanlarga oid elektron resurslardan, audio video materiallardan 120 000ta o'quvchi va talabalar foydalanib tahsil olib kelmoqda. Ushbu ochiq ta'limga o'xshash ta'lim markazlari Kanada, Avstriya, Ispaniya, Pokiston, Niderlandiya, Turkiya, Hindiston va boshqa davlatlarda mavjud.

Germaniyada axborot-ta'lim muhitidan foydalanib ta'lim berish o'ziga xos xususiyatlarga ega. Ushbu ta'lim berish tizimi markazlashtirilgan holda oliy-kasbiy ta'lim mutaxassislarini masofadan turib tayyorlashni rejalashtirishdan boshlangan. Mutaxassislarni tarmog'i orqali tayyorlash, amalga oshirayotgan oliy kasb-hunar ta'lim muassasasiga misol sifatida, Xagen (fernuni-hagen.de) va Drezden texnologiya (tu-dresden.de) universitetlarini keltirish mumkin. Universitetda 50000 dan ortiq talabaga aniq va tabiiy fanlarga oid o'quv resurslari xizmati amalga oshiriladi

Xitoyning ko'plab ta'lim oluvchilari «Netease Open Course» platformasidagi elektron resurslaridan foydalanishadi. «Netease» kurslarining ochilishi erkin vaqtda to'lovlarsiz ta'lim olish uchun muqobil universitet bo'lib qolmoqda. Tarmoqqa 20 mingdan ortiq ma'ruzalar (video konferensiyalar, dunyoning eng mashhur universitetlar seminar mashg'ulotlari) joylashgan. Ko'plab video darslarda Xitoy subtitr (izohli yozuv)lari mavjuddir. Foydalanuvchilar qo'l telefonlari orqali, ularni yo'lda ketayotganda, ishda yoki sport bilan shug'ullanayotgan vaqtda foydalanish imkoniyatiga ega.

«Netease» ochiq kurslari Shtab-kvartirasi Xanchjou shahrida joylashgan bo'lib, 5 yil mobaynida ofis Oksford, Yelsk va Kembrij universitetlari hamda, Amerika web-resurslari bilan hamkorlik aloqalarini o'rnatdi. Bu yerda asosan ommaviy foydalanuvchilarni 18-35 yoshlilar hisoblanadi. Bularni asosan, universitet talabalari yoki yaqinda bitirgan bitiruvchilar tashkil etadi.

Yaponiya ta'lim vazirligining 2003 yilgacha bo'lgan milliy o'quv rejasi birinchi navbatda boshlang'ich, o'rta maktab va universitet o'qituvchilarini axborot-kommunikatsiya texnologiyalari savodxonligini oshirish bo'yicha qayta tayyorlashga qaratiladi. 2005 yilga kelib, Yaponiyadagi barcha ta'lim

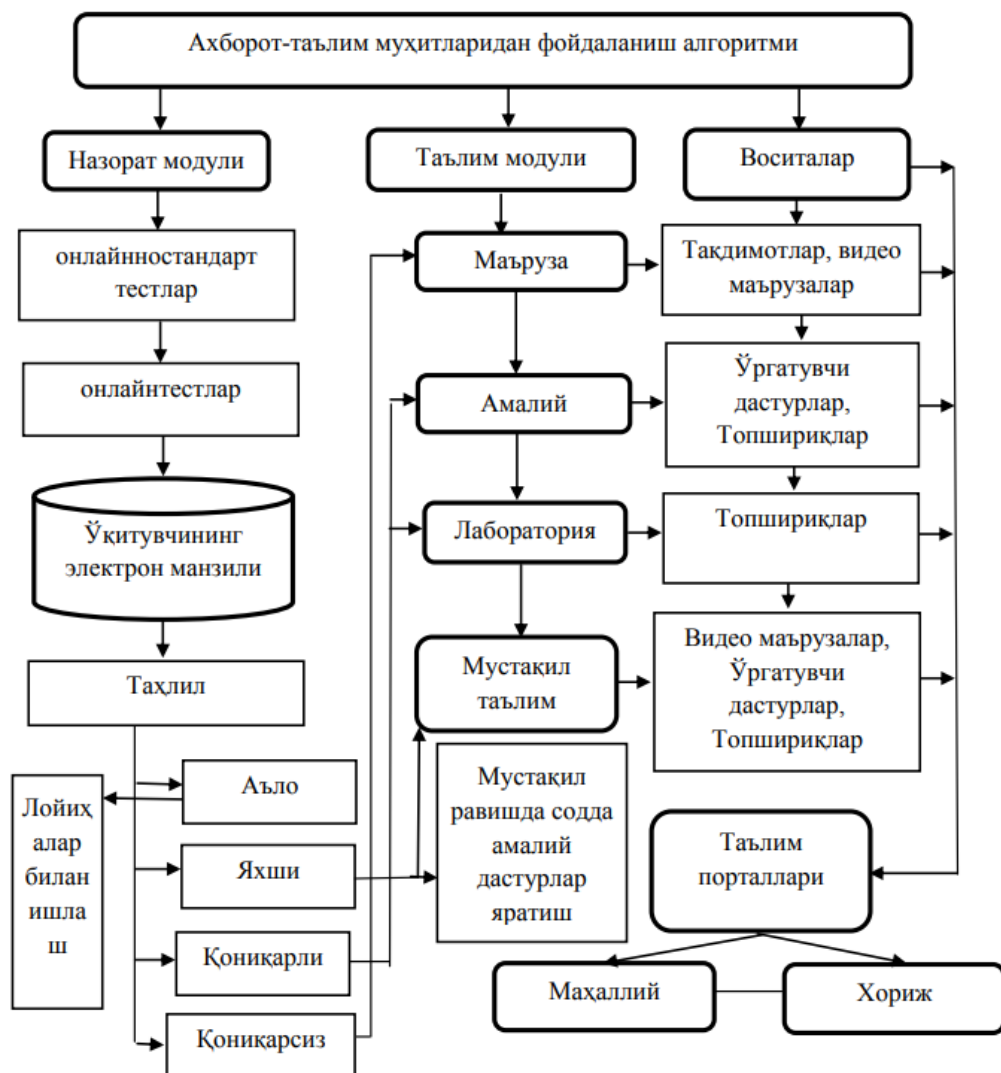
muassasalari 24 soat davomida yuqori tezlikda ishlaydigan ADSL va optik tolali Internet tarmog'iga ulandi. O'quvchilarning fanlardan o'zlashtirish darajasini baholash uchun o'qituvchi jurnali va jurnallar elektron shaklga o'tkazilib, Internet tarmog'iga joylashtirilib borildi. Ota-onalar o'z farzandlarini fanlardan o'zlashtirish darajasini onlayn nazorat qilib borishi va o'qituvchilar bilan elektron pochta orqali muloqot qilib borish uchun Internet tarmog'ida maxsus ma'lumotlar bazasi yaratildi. Shuningdek, ota-onalar bilan video konferensiyalar orqali muloqotlar o'tkazib boriladi. Yaponiyada eng yaxshi jahon standartlariga muvofiq ta'lim sifatini oshirib kelayotgan Kyoto universiteti (kyotou.ac.jp/en), Tokio texnologiyalari instituti (titech.ac.jp), Tokio universiteti (u-tokyo.ac.jp), Kyushu universiteti (kyushu-u.ac.jp), Nagoya universiteti (civil.nagoya-u.ac.jp), Osaka universiteti (osakau.ac.jp)larini misol sifatida keltirish mumkin.

Janubiy Koreyada dunyoda ta'lim jarayonida axborot-kommunikatsiya texnologiyalaridan keng foydalanayotgan davlat hisoblandi, hozirgi kunda har bir darsda axborot-ta'lim muhitidan keng foydalaniladi. O'quvchilar uchun qo'l telefonlari va smartfonlarida darsda, darsdan tashqari va uyda foydalanish uchun o'quv resurslari yaratilgan. Shuningdek, e-learning o'qitish tizimi faol tarzda yo'lgan qo'yilgan bo'lib, unda 700 dan ortiq elektron ta'lim provayderlar kompaniyasi faoliyat ko'rsatib kelmoqda.

Rossiya Federatsiyasida ta'limni axborotlashtirishga hamda ulardan ta'lim jarayonida foydalanishni rivojlantirish bo'yicha ko'plab ilmiy tadqiqot ishlari amalga oshirildi. Birinchi qadam sifatida Rossiya universitetlari davlat dasturlari doirasida Rossiya milliy, ilmiy ta'limiy runnet.ru tarmog'i shakllantirilib, ushbu tarmoqqa universitetlar, katta ilmiy ta'lim muassasalar birlashtirildi hamda, dunyo ta'lim muassasalarining ilmiy ta'lim resurslaridan foydalanishni amalga oshirildi. 2001-2005 yillar oralig'ida esa yagona axborot-ta'limni rivojlantirish maqsadida bir qancha ta'lim portallari yaratilib, ushbu yaratilgan portallarga 10 000 dan ortiq o'quv resurslari jamlanib, 42ta hududiy masofaviy ta'lim markazi Internet tarmog'i orqali ta'lim berish uchun axborot-kommunikatsion qurilmalari bilan ta'minlandi [6]. Ayni paytda informatika fanini o'qitishga mo'ljallangan access-video.ru, academu.yandex.ru, coursera.ru, loftblog.ru, cictemnik.ru kabi axborot-ta'lim muhitlaridan bo'lajak informatika o'qituvchilarini tayyorlashda keng ko'lamda foydalanilib kelinmoqda.

Bu borada mamalakatimizda Ziyonet axborot-ta'lim tarmog'i portali (ziyonet.uz), Ochiq ta'lim video portali (uTube.uz), axborot iexnologiyalari universitetining web-sayti (acm.tuit.uz) kabi axborot-ta'lim muhitlari yaratilib, o'quv jarayonida keng ko'lamda foydalanilib kelinmoqda.

Ayni paytda ushbu axborot-ta'lim muhitlaridan bo'lajak informatika o'qituvchilarni tayyorlash bo'yicha o'qitish algoritmi va foydalanish metodikasini takomillashtirish zarurati tug'ilmoqda. Shu bois biz quyidagi foydalanish algoritmi tavsiya etamiz (1-rasmga qarang).



1-rasm. Axborot-ta'lim muhitidan foydalanish algoritmining tuzilmasi.

Professor-o'qituvchi onlayn tartibda axborot-ta'lim muhitlaridan foydalanib, informatika turkumiga kiruvchi fanlarni o'zlatirishini nazorat va tahlil qilib boradi. A'lo va yaxshi bahoga o'zlashtirgan talabalarga amaliy dasturlar, elektron darsliklar, o'rgatuvchi dasturlar hamda kichchik loyihalar bajarish topshiriqlari berib boriladi.

Qoniqarli va qoniqarsiz baho olgan talabalarga ma'ruzalarni, amaliy mashg'ulotlarni, laboratoriya topshiriqlarni qayta o'zlashtirish bo'yicha onlayn topshiriqlar berib boradi.

O'shbu algoritm hamda 1-jadvalda keltirilgan axborot-ta'lim muhitlaridan foydalangan holda Navoiy davlat pedagogika institutida «Informatika o'qitish metodikasi» ta'lim yo'nalishining ta'lim oluvchi talabalarini o'qitishda foydalanindi.

Т.р	Фанлар	Фойдаланган ахборот-таълим мухитлари
1.	Алгоритмлар ва дастурлаш тиллари	ziyonet.uz, acm.tuit.uz, uTube.com
2.	Информатика	ziyonet.uz, uTube.com
3.	Ахборот тизимлари	ziyonet.uz, uTube.com
4.	Компьютер графикаси	ziyonet.uz, uTube.com
5.	Веб дизайн	ziyonet.uz, uTube.com, academu.yandex.ru, coursera.ru, loftblog.ru
6.	Маълумотлар базаси	ziyonet.uz, access-video.ru
7.	Тармоқ технологиялари	ziyonet.uz, uTube.com
8.	Компьютер таъминот	ziyonet.uz, uTube.com, cictemnik.ru
9.	Компьютерли моделлаштириш	ziyonet.uz, uTube.com
10.	Танловфанлар	ziyonet.uz, uTube.com, academu.yandex.ru, coursera.ru

Informatika turkumiga kiruvchi fanlarni o'qitishda 1-rasmda keltirilgan algoritm asosida hamda 1-jadvalda keltirilgan va shunga o'xshash axborot-ta'lim muhitlaridan foydalanilsa, quyidagi imkoniyatlarga erishadi: shaxsning yangi g'oyalarni yaratish va qabul qilishga tayyorligini tavsiflovchi ijodiy qobiliyatini rivojlantiradi; shaxs hatti-harakati, faoliyatida kreativ mavjudligini amaldagi an'anaviy holatlar, tajribalardan farqli o'laroq muammoni yangicha yondashuvlardan foydalangan holda, nostandart usulda yechishga oid mustaqil qaror qabul qilish iqtidorini rivojlantiradi; topshiriqlarni, faollikni rivojlantirishga xizmat qiladi.

Tahlil va natijalar. Pedagogik tajriba-sinovini o'tkazish jarayonida amalga oshirilgan pedagogik eksperimentning muvaffaqiyati, ushbu jarayonda uning tashkiliy-pedagogik jihatlarini inobatga olishi zaruriyatini ko'rsatadi. Shuning uchun ham mazkur jihatlariga alohida e'tibor qaratildi. Tajriba-sinov ishlarini tashkil etish jarayoni Navoiy davlat pedagogika institutidagi professor-o'qituvchilarning fikr va mulohazalarini bilish bilan tashkil etildi. Tajriba-sinov ishlari 2017- 2020 yillarda Navoiy davlat pedagogika institutining «Informatika o'qitish metodikasi» ta'lim yo'nalishida kunduzgi va sirtqi ta'lim oluvchi talabalar o'rtasida o'tkazildi. Tajriba va nazorat guruhlarini uchun jami 246 nafar talaba tanlab olindi.

Tajriba-sinov davrida informatika fani professor-o'qituvchisi va talabalar bilan axborot-ta'lim muhitlarning asosiy hususiyatlariga oid suhbat va kuzatuvlar olib borildi. Suhbat va kuzatish natijalari uchun 18 nafar informatika fani professor-o'qituvchisi va 246 nafar talaba ishtirok etdi.

Professor-o'qituvchilar tomonidan so'rov natijalaridan ma'lum bo'ldiki, 56,4 % o'qituvchi dars jarayonida axborot-ta'lim muhitlaridan foydalanish zarur, 28,6 % mustaqil ravshda foydalanish maqsadga muvofiq, 14,8 % qiyin

mavzularni o'zlashtirishda foydalanish mumkin, 0,2 % bilimlarni o'zlashtirishga yordam bermaydi, deb hisoblashdi.

Talabalar tomonidan so'rov natijalaridan ma'lum bo'ldiki, 45 % o'qituvchi dars jarayonida axborot-ta'lim muhitlaridan foydalanish zarur, 40,3 % mustaqil ravshda foydalanish maqsadga muvofiq, 14,4 % qiyin mavzularni o'zlashtirishda foydalanish mumkin, 0,3 % bilimlarni o'zlashtirishga yordam bermaydi, deb hisoblashdi.

Tajriba-sinov ishlarining umumlashtiruvchi bosqichi 2019 yilda olingan sonli ma'lumotlarning natijalari tahlil qilinib, umumlashtirildi va uning ishonchligini tekshirish maqsadida Student Fisher kriteriyasi asosida matematik-statistik tahlili qilindi. Mazkur kriteriyadan foydalanishda tanlanmalar uchun mos o'rta qiymatlar

$$\bar{X} = \frac{1}{n} \sum_{i=1}^4 n_i X_i$$

tarqoqlik koeffitsientlarini

$$D_n = \sum_{i=1}^4 \frac{n_i (x_i - \bar{X})^2}{n-1}$$

O'zlashtirish ko'rsatkichlarini aniqlashda esa

$$A\% = \frac{\bar{X}}{3} \cdot 100\% - \frac{\bar{Y}}{3} \cdot 100\%$$

formulalardan foydalanildi. Olingan sonli natijalarga ko'ra, o'qitish samaradorligining baholash mezoni birdan kattaligiva bilish darajasining baholash mezoni noldan katta ekan. Bundan ma'lumki, tajriba guruhi ko'rsatkichlari nazorat guruhidagidan yuqori.

Hisoblash natijasiga ko'ra, tajriba guruhining o'rtacha o'zlashtirish ko'rsatkichi nazorat guruhiga nisbatan yuqori ekanligi, ya'ni, 11,4 % ga oshganligi ma'lum bo'ldi.

Xulosa va takliflar. Xulosa qilib aytganda, informatika o'qituvchisini tayyorlash uchun Office dasturlarni, grafik dasturlarni, ma'lumotlar bazasini boshqariz tizmlarini, dasturlash tillarini hamda, kompyuterning dasturiy va texnik ta'minotini o'rganishi talab etadi. Shu sababli bo'lajak o'qituvchilar ushbu dasturiy vositalarni va kompyuterning texnik ta'minotini o'rganishi, ularni qo'llash ko'nikmalariga ega bo'lishini taqozo etadi. Ushbu dasturiy vositalarni mukammal o'rganishning eng qulay usullaridan biri, ularni mustaqil ravishda axborot-ta'lim muhitida foydalanishdan iboratdir. Bu esa o'z navbatida, axborot-

ta'lim muhitiga joylashtirilgan o'rgatuvchi dasturlaridan foydalanishni talab etadi. Axborot-ta'lim muhitidan foydalanib, dasturiy vositalarni mustaqil ravishda o'rganish, ulardan foydalanish qonun-qoidalarni intuitiv darajada tushunishga, kerakli axborotlarni izlab topishga hamda ular bilan ishlashni o'rgatadi. Shu bois bo'lajak informatika o'qituvchilarni tayyorlashda yuqorida taqdim etilgan algoritmdan hamda taqdim etilayotgan axborot-ta'lim muhitlaridan foydalanishni tavsiya etamiz. Mazkur o'qitish algoritmi hamda axborot-ta'lim muhitlaridan ta'lim oluvchini ko'proq mustaqil shug'illanishi va o'z-o'zini baholash uchun samarali hisoblanadi.

Axborot-ta'lim muhitida joylashtirilgan o'rgatuvchi pedagogik dasturiy vositalar asosida o'quv jarayonini tashkil etishda ta'lim oluvchini o'qishga qiziqishni orttiradi, ta'limning interaktiv xususiyati asosida kognitiv, kreativlik, motivatsiya, evristik fikrlash qobiliyatlarini rivojlantiradi va o'quv materiallarini o'zlashtirilishining samaradorligini oshiradi. Shu bilan bir o'rganishi qiyin yoxud murakkab bo'lgan dasturlarni modellashtirish va kuzatish imkoniyatini beradi, kompyuter dasturlarining o'zlashtirilishi nafaqat darajasiga ko'ra, balki ta'lim oluvchilar erishgan mantiq va qabul qilishlari darajasiga ko'ra ham samarali bo'lishini ta'minlaydi. Shuningdek, ta'lim oluvchilarning fanga ilmiy va ijodiy yondoshishga o'rgatadi, o'quv mavzularini oson o'zlashtirishiga, ilmiy dunyoqarashining shakllanishida muhim omil bo'lib xizmat qiladi, bilimlarni mustahkam egallashga yordam beradi, his tuyg'ularga ta'sir etgan holda fanga nisbatan qiziqishi oshadi. Shunga ko'ra, ta'kidlashimiz mumkinki, ta'lim oluvchilarning informatika turkumiga kiruvchi fanlaridan ijodiy faolligini va o'quv faoliyatining to'g'ri tashkil etilishida axborot-ta'lim muhiti va unga mo'ljallangan o'rgatuvchi dasturlar, o'z-o'zini nazorat qiluvchi onlayn vositalardan foydalanish maqsadga muvofiqdir. Bu bo'lajak informatika o'qituvchilarini mustaqil o'rganishi uchun ayni muddao hisoblanadi.

Yuqorida olib borilgan statistik-tahlillardan xulosa qilib aytish mumkinki, pedagogika oliy ta'lim muassasalarida bo'lajak informatika o'qituvchilarini tayyorlashda taqdim etilgan algoritmdan asosida axborot-ta'lim muhitidan foydalanish uchun ommalashtirish mumkinligiga asos bo'ladi.

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THEORETICAL AND METHODOLOGICAL FOUNDATIONS, SIGNS: GOALS AND OBJECTIVES OF LEGAL RESPONSIBILITY

Annotation. The article analyzes the theoretical and methodological foundations, signs and objectives of legal responsibility. The author examines the legal system and the problem of legal responsibility in it, as well as issues of crime and punishment. The registration system has been liberalized on the basis of international standards, according to which the development of the judicial sphere, in particular the system of exemption from legal liability, is an urgent problem of today, as well as a widely studied topic in the world experience, and the author has studied this relevance.

Keywords: law, international, legal system, standards, liberalization, judicial and legal sphere, legal responsibility.

In new Uzbekistan, under the leadership of the Head of State Sh.M.Mirziyoev, in the wide-scale reforms implemented in all directions and fields, special attention is paid to improving the organizational and legal foundations of the system of protection of human rights and freedoms.

As the President of Uzbekistan Sh.M. Mirziyoev noted, the establishment of New Uzbekistan is not just a desire, a subjective phenomenon, but a fundamental historical basis, which is required by the existing political-legal, social-economic, spiritual-educational situation in our country, and the people's. It is an objective necessity that corresponds to the aspirations of the century and fully meets its national interests. New Uzbekistan is a country that develops on the basis of the principles of friendly cooperation with the world community, strictly following the universally recognized norms and principles of democracy, human rights and freedoms, and the ultimate goal of which is to create a free, prosperous and prosperous life for our people.⁴⁶

In these processes, the legal system is liberalized on the basis of international standards, in which the development of the field of judicial law, in particular, the system of exemption from legal liability, is set as a priority.

Today, the issue of exemption from legal responsibility is considered urgent for the international community, and countries and international organizations pay special attention to its causes and development trends. According to some international organizations, at least 183 regional conflicts will occur around the

⁴⁶ New Uzbekistan is becoming a country of democratic changes, wide opportunities and practical work 17.08.2021. Answers of the President of the Republic of Uzbekistan Shavkat Mirziyoyev to the questions of Salim Doniyorov, editor-in-chief of the "Yangi Uzbekistan" newspaper. <https://president.uz/uz/lists/view/4547>

world in 2023, which is the highest rate in the last 30 years.⁴⁷ According to the UN, trends in criminal responsibility are increasing in all regions, especially corruption-related crimes. Currently, the global damage of corruption is about 3 trillion US dollars.⁴⁸ According to the researchers, in 2021 alone, more than 4.3 million people worldwide were charged with a crime, a 26% increase from 2019.⁴⁹

From this point of view, many countries of the world and a number of international organizations are committed to comprehensively ensuring human rights, improving the legal system, preventing and eliminating crimes and violations, as well as developing the organizational and legal foundations of the institution of legal responsibility and exemption from it in the processes of liberalization of the legal system. practical measures are being taken.

In recent years, important programs aimed at state and society building, economic liberalization, support of private property and entrepreneurship have been consistently implemented in our country in the course of thorough reforms, and extensive reforms aimed at ensuring human rights have been implemented.

The Decree of the President of the Republic of Uzbekistan dated January 28, 2022 No. PF-60 on the strategy «Uzbekistan - 2030» was adopted in order to ensure the continuity of these reforms and bring the development of society to a new level.

Systematic work is being carried out to improve the judicial system, comprehensively ensure the rule of law, and develop the human rights system based on international standards. In this regard, in the last two years, 10 laws on law enforcement activities, about 40 decrees and decisions of the President, and more than 60 government decisions were adopted.⁵⁰ Ensuring the rule of law was defined as one of the main principles of the development of New Uzbekistan.⁵¹

As well as the changes made in all directions to the new version of the Constitution of the Republic of Uzbekistan, which was adopted by popular vote on April 30, 2023, the main guarantee of the rights of a person arrested on suspicion of committing a crime («Miranda rule»), detention for a maximum of 48 hours until the decision of a civil court norms such as impossibility («habeas corpus» institution) and the prohibition of the death penalty were reflected and strengthened at the level of the constitution.

The successful implementation of this practice in the country can be analyzed by the dynamics of increasing cases of acquittals by judicial authorities

⁴⁷ Исследование: в 2023 году в мире произошло 183 региональных конфликта. 11.12.2023.

<https://realnoevremya.ru/news/298000-v-2023-godu-vo-vsem-mire-proizoshlo-183-regionalnyh-konflikta>

⁴⁸ The speech of the President of the Republic of Uzbekistan Shavkat Mirziyoyev at the ceremony of awarding the high international award in the field of fight against corruption. 19.12.2023. <https://president.uz/uz/lists/view/6934>.

⁴⁹ M. Akramova. special grounds for exemption from criminal liability. 12.00.08 – criminal law. criminology. criminal law. Doctor of Philosophy (PhD) Dissertation in Legal Sciences. Tashkent - 2022

⁵⁰ President: Our goal is to please our people by ensuring justice and the rule of law. 28.07.2023. <https://president.uz/uz/lists/view/6519>

⁵¹ President Shavkat Mirziyoyev's speech at the first plenary session of the Council of Foreign Investors under the President of the Republic of Uzbekistan. 11/16/2022. <https://president.uz/uz/lists/view/5702>

from year to year. In particular, during the years 2007-2015, courts considered 498,730 criminal cases against 688,354 persons, and 110 persons were acquitted, and during the years 2016-2022, 322,531 criminal cases were considered against 418,992 persons, of which 4,764 persons justified.⁵²

At this point, in order to make the Constitution a directly working document, that is, to establish the practice of directly applying its norms in the courts, the decision of the Plenum of the Supreme Court was adopted on this issue.⁵³ According to the decision, the provision of supreme legal force of the Constitution means that its norms prevail over all laws and other regulatory legal documents. Accordingly, it was noted that the courts should evaluate the content of the law and other legal documents regulating the legal relations under consideration and apply the norms of the Constitution as a normative legal basis with directly applicable supreme legal force.⁵⁴

In its constitution, the creation of a social state was defined as a strategic goal, and the principles of social justice and solidarity were introduced, and the constitutional foundations were strengthened, providing completely new mechanisms for the protection of human rights and freedoms.⁵⁵

According to Article 29 of the Constitution, anyone convicted of a crime has the right to have the sentence reviewed by a higher court in accordance with the procedure established by law, as well as the right to petition for pardon or commutation of sentence. The rights of victims of crimes are protected by law. The state provides victims with protection and access to justice, creates conditions for compensation for the damage caused to them.⁵⁶ On the basis of this article of the Constitution, the right to amnesty of persons serving or having served a sentence has been strengthened at the constitutional level.

By amnesty, a citizen may be fully or partially released from punishment, or the punishment imposed by the court may be replaced by another lighter punishment, or the conviction may be removed. This practice is also applied to citizens of the Republic of Uzbekistan and citizens of foreign countries and stateless persons.

The purpose of punishing a person who has committed a crime is to re-educate him and make him realize his mistakes. That's why it is important to give people who have committed crimes because of their delusions an opportunity to wash away their guilt before the society and return them to the family. The policy of amnesty and resocialization of convicts used in recent years is actually giving

⁵² F. Primov. The institution of "habeas corpus": plays an important role in the guaranteed protection of human rights

17.06.2023. <https://khabar.uz/huquq/habeas-korpus-instituti-inson-huquqlarini>

⁵³ Decision of the Plenum of the Supreme Court of the Republic of Uzbekistan, No. 16 dated 23.06.2023. <https://lex.uz/docs/6523654>

⁵⁴ Decision of the Plenum of the Supreme Court of the Republic of Uzbekistan, No. 16 dated 23.06.2023. <https://lex.uz/docs/6523654>

⁵⁵ Decree of the President of the Republic of Uzbekistan on the first priority measures for the implementation of the newly revised Constitution of the Republic of Uzbekistan. No. PF-67 dated 08.05.2023

⁵⁶ Constitution of the Republic of Uzbekistan. <https://lex.uz/docs/6445145>

its positive results. Since 2017, 22 decrees on amnesty have been adopted by the President, and these documents have had a positive effect on the fate of more than 6,000 people.⁵⁷

Special attention is paid to the issue of exemption from legal responsibility in the reforms of the judiciary. In the congratulatory speech of the President of the Republic of Uzbekistan, Sh.M. Mirziyoev, on the occasion of the 31st anniversary of the adoption of the Constitution, it is considered a priority to adapt judicial reforms to the new constitutional space, in this process, to direct the activities of courts and law enforcement agencies to the protection of human rights, freedoms and legal interests.⁵⁸

From this point of view, the relevance of the topic is related to the following.

First of all, researching the legal nature of the institution of exemption from legal responsibility, improving its organizational and legal foundations, and adapting the relevant legislation to international standards are of urgent importance.

Secondly, to analyze the internal and external factors affecting the activity of the institution of legal responsibility and to develop proposals and conclusions regarding the improvement of the institution of exemption from administrative, economic, financial, civil and criminal responsibility in the national legislation.

Thirdly, legal liability as a multifaceted legal phenomenon is one of the effective elements of legal regulation. In recent decades, the crime situation around the world has become significantly more complicated. However, it has been historically proven that only negative legal responsibility measures cannot solve the problem of fighting crime. The modern legal policy of our country should be focused on strengthening positive legal responsibility, educating a law-abiding and law-respecting person, and eliminating legal nihilism. The relevance of positive legal responsibility is also explained by the fact that fundamental changes and processes occurring in the field of legal regulation force us to reconsider many basic theoretical rules related to legal responsibility.

Fourthly, there is no general opinion in legal science about the concept, essence, content, foundations, principles, tasks of positive legal responsibility. The theoretically correct solution of these issues largely determines the activity of the legislative and law enforcement bodies and the behavior of citizens. In addition, today the problem of positive legal responsibility is gaining priority in connection with the establishment of universal human values, the construction of a legal state and the formation of a civil society.

⁵⁷ Pardons benefit society. 17.04.2023. <https://zamon.uz/uz-to/detail/afv-etish-jamiyat-uchun-foyda-keltiradi-ozbekiston>

⁵⁸ Sh. Mirziyoev. Holiday greetings to the people of Uzbekistan. 07.12.2023. <https://president.uz/uz/lists/view/6917>

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*Xaydarova S., t.f.n.
dotsent
Qo‘qon Davlat Pedagogika Instituti
O‘zbekiston Respublikasi*

SQL DA SO‘ROVLARNI UNION OPERATORI YORDAMIDA BIRLASHTIRISH

Annotatsiya. Ushbu maqolada SQL tilida birlashtirilgan so‘rovlar yaratish va unda UNION operatoridan foydalanish usullari ko‘rib chiqilgan.

Tayanch so‘z va iboralar: SQL tili, UNION va UNION ALL operatorlari, WHERE konstruktsiyasi va SELECT instruktsiyasi.

*Khaidarova S., candidate of technical sciences
associate professor
Kokand State Pedagogical Institute
Republic of Uzbekistan*

COMBINING QUERIES IN SQL USING THE UNION OPERATOR

Annotation. This article discusses methods for creating combined queries in SQL language and using the Union operator in it.

Keywords and expressions: SQL language, UNION and UNION ALL operators, WHERE clause and SELECT statement.

Hozirgi paytda ma'lumotlar bazasining eng keng tarqalgan modeli bu relyatsion modeldir. Relyatsion ma'lumot bazalari ma'lumotlarni jadvallarga joylash va jadvallar orasidamos bog'liqliklarni, ya'ni, munosabatni (relyatsiyani) o'rnatishga asoslangan.

SQL – bu strukturalashgan so‘rovlar tilining (Structured Query Language) qisqartirilgan nomlanishi bo‘lib, SQL foydalanuvchining ma'lumotlar bazasi bilan o‘zaro aloqasini tashkil etish uchun qo‘llaniluvchi tildir. SQL faqat relyatsion deb nomlanuvchi bir turdagi ma'lumotlar bazasi bilan ishlaydi.

O‘zbekistonda uzluksiz ta’lim tizimida SQL tili va uni o‘qitish masalalari E.S. Babajanov, S. Xaydarova va boshqa olimlarning qator ilmiy ishlarida ko‘rib chiqilgan. SQL tili va uning tarkibi, SQL tilining tarixi⁵⁹, SQL tilining imkoniyatlari va qo‘llanilishi⁶⁰ haqida ma'lumotlar keltirilgan.

SQL da so‘rovlar UNION operatori yordamida birlashtiriladi, bu operator SELECT instruktsiyasidan ko‘p marta foydalanish orqali yagona natija olish

⁵⁹ E.S. Babajanov. SQL tili va uning tarkibi. SQL tili tarixi. <https://referat.arxiv.uz/index.php?do=files&op=download&fileid=63504>

⁶⁰ S. Xaydarova. SQL tili: Imkoniyatlari va qo‘llanilishi. O‘quv qo‘llanma. “Innovatsiya - Ziyo” nashriyoti, 2020, - 120 bet.

imkonini beradi. Bu operatoridan foydalanish juda oddiy. Buning uchun har bir SELECT instruksiyasi orasiga UNION kalit soʻzini qoʻshish kifoya.

Misol koʻraylik. Faraz qilaylik, bizga Illinoys, Indiana va Michigan shtatidagi barcha mijozlar haqidagi maʼlumotlarni oʻz ichiga olgan hisobotni olish kerak boʻlsin (Customers jadvali).

Customers jadvali

cust_id	cust_name	cust_address	cust_city	cust_state	cust_zip	cust_country	cust_contact	cust_email
1000000001	Village Toys	200 Maple Lane	Detroit	MI	44444	USA	John Smith	sales@villagetoy.com
1000000002	Kids Place	333 South Lake Drive	Columbus	OH	43333	USA	Michelle Green	
1000000003	Fun4All	1 Sunny Place	Muncie	IN	42222	USA	Jim Jones	jjones@fun4all.com
1000000004	Fun4All	829 Riverside Drive	Phoenix	AZ	88888	USA	Denise L. Stephens	dstephens@fun4all.com
1000000005	The Toy Store	4545 53rd Street	Chicago	IL	54545	USA	Kim Howard	

Bu hisobotga siz shtati qanday boʻlishidan qatʼiy nazar nomi Fun4All boʻlgan mijoz haqidagi maʼlumotlarni ham qoʻshmoqchisiz. Bunda albatta bu talablarni bajarish uchun WHERE konstruktsiyasidan foydalansa boʻladi, lekin bu holda UNION operatoridan foydalanish qulayroq. Aytib oʻtilganidek, UNION operatori SELECT instruksiyasidan koʻp marta foydalanishni taqozo qiladi, avval biz ularni alohida koʻrib chiqib, soʻngra birlashtiramiz.

1-soʻrov quyidagicha boʻladi:

```
SELECT cust_name,cust_contact,cust_email
FROM Customers
WHERE cust_state IN('IL','IN','MI');
```

Bu SELECT instruksiyasi mijozning shtatini operatorida koʻrsatilgan Illinoys, Indiana va Michigan shtatlariga tegishli boʻlgan satrlarni chiqarib beradi.

Bu soʻrov natijasi quyida keltirilgan:

```
cust_namecust_contactcust_email
```

Village ToysJohn Smithsales@villagetoy.com

Fun4AllJim Jonesjjones@fun4all.com

The Toy Store Kim HowardNULL

2-soʻrov quyidagicha boʻladi:

```
SELECT cust_name,cust_contact,cust_email
FROM Customers
WHERE cust_name = 'Fun4All';
```

Bu SELECT instruktsiyasi nomi Fun4All bo‘lgan mijozga tegishli bo‘lgan satrlarni chiqarib beradi.

```
Bu so‘rov natijasi quyida keltirilgan:
cust_namecust_contactcust_email
```

```
-----
Fun4AllJim Jonesjjones@fun4all.com
Fun4AllDenise L. Stephensdstephens@fun4all.com
Ikkala so‘rovni birlashtirish uchun quyidagilarni bajarish kerak:
```

```
SELECT cust_name,cust_contact,cust_email
FROM Customers
WHERE cust_state IN('IL','IN','MI')
UNION
SELECT cust_name,cust_contact,cust_email
FROM Customers
WHERE cust_name = 'Fun4All';
```

Bu birlashtirilgan so‘rov yuqorida keltirilgan birinchi va ikkinchi so‘rovlarning biri-biridan UNION kalit so‘zi bilan ajratilgan SELECT instruktsiyalarini o‘z ichiga oladi.

```
Bu birlashtiruvchi so‘rov natijasi quyidagicha bo‘ladi:
cust_namecust_contactcust_email
```

```
-----
Fun4AllJim Jonesjjones@fun4all.com
Fun4AllDenise L. Stephensdstephens@fun4all.com
Village ToysJohn Smithsales@villagetoys.com
The Toy Store Kim HowardNULL
```

SELECT instruktsiyalari alohida bajarilganda birinchi SELECT instruktsiyasi natija sifatida uchta satrni, ikkinchi SELECT instruktsiyasi esa ikkita satrni chiqarib beryapti. Bu ikki instruktsiya UNION operatori yordamida birlashtirilganda natija sifatida beshta emas, faqat to‘rtta satr chiqarib berilyapti. Natijalarga e‘tibor bersak, birinchi SELECT instruktsiyasi natijasidagi ikkinchi satr ikkinchi SELECT instruktsiyasi instruktsiyasi natijasidagi birinchi satrda takrorlanayapti.

UNION operatori natijalar to‘plamidan takrorlanuvchi satrlarni o‘chiradi, bu satr Indiana shtatidan bo‘lgan Fun4All nomli mijozga tegishli bo‘lgan satr bo‘lib, u ikkala SELECT instruktsiyasi tomonidan ham hosil qilingan edi: Fun4All Jim Jonesjjones@fun4all.com. UNION operatori yordamida birlashtirilgan so‘rov natijasida takrorlanuvchi satr bo‘lmaydi va natija unikal satrlardan iborat bo‘ladi.

Endi shu so‘rovni UNION operatoridan emas, balki WHERE konstruktsiyasidan foydalanib yarataylik:

```
SELECT cust_name,cust_contact,cust_email
FROM Customers
WHERE cust_state IN('IL', 'IN', 'MI')
OR cust_name = 'Fun4All';
```

UNION operatori va WHERE konstruktsiyasidan foydalanib yaratilgan birlashtiruvchi so‘rovlar natijasi bir xil bo‘ladi, lekin bu berilgan misoldaularni taqqoslash shuni ko‘rsatdiki, UNION operatorini qo‘llash WHERE konstruktsiyasiga nisbatan ko‘proq noqulay bo‘lishi mumkin.

Keltirilgan jadvallar orqali ma’lumotlar bazasini strukturalashni ko‘rgazmali ravishda ko‘rsatishga erishildi. Olingan bilimlarni foydalanuvchi o‘z shaxsiy bazasini yaratishda qo‘llashi mumkin.

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RUSSIAN LANGUAGE IN THE WORLD LANGUAGE SYSTEM

Abstract. Indicates that the main functions of the language are social, not the sinuses of the language. All people, regardless of their affiliation and social or professional groups, should communicate, think and express their opinions.

Key words: Russian language, international educational centers, World Languages Club, International Association of Teachers of Russian Language and Literature, term.

Society, which is the most important tool of people, cannot live without the use of language. There is no human activity - they do not use it as an expression of their own thoughts, feelings and willpower. Over time, people became interested in its constant companion, language, and created a science about it. This science is now called linguistics or linguistic science. For those whose profession is related to teaching or research, this science is also very important for those who want to use it as a professional tool (teachers, lawyers, lecturers, journalists, writers, etc.). Methodology «The Russian language is the language of the world,» says the famous linguist Vyacheslav Belousov. In the third millennium it does not lose its cultural or historical significance. It will maintain its position not only in the CIS countries, but throughout the world.

First of all, the Russian language (along with English, Chinese, French, Spanish and Arabic) is the official language of many international organizations - the UN, UNESCO and others. This means that official documents and special journals of these organizations are published in Russian, their websites are created and work is carried out. Russian is one of the languages spoken by almost a third of international non-governmental organizations, including the World Federation of Trade Unions and the International Committee for European Security. It is also used as a business language at major international conferences and summits to facilitate communication between representatives of different countries.

Secondly, Russian is the language of one of the largest international educational centers. Thirdly, the Russian language opens up the possibility of familiarization not only with the riches of Russian science and culture, but also of other countries, and acts as an intermediary between different peoples, in particular in the Eurasian region. Finally, most of the scientific and fiction literature published in the world has been translated into Russian. Fourthly, Russia plays an important role in the international education market. The Russian language makes it possible to gain high professional knowledge at the level of world standards. Fifthly, the desire to get acquainted with the culture, in particular

with the literature that stands behind it, which has universal significance, is still an important reason for interest in learning the Russian language.

Communication between UNESCO and different cultures of the Council of Europe considers this as a pressing task of our time, since such conversations imply mutual understanding of the values and traditions of other peoples, the exchange of experience accumulated over centuries, the exchange of views on topical issues of the past, present and future of peoples living in the world. A certain group of students are attracted from Zoloto by their difficulties with the Russian language. According to American students, Russian is chosen by those who like to overcome obstacles. Results The Russian language is the language of the richest fiction, the importance of which in the world is incredibly great. As in the last decade, interest in the Russian language in countries outside the CIS has decreased somewhat. But today more and more people are turning to it again. On the one hand, they are interested in Russian culture, and on the other, this is a purely pragmatic interest, since the Russian language gives them the opportunity to cooperate with Russian businessmen and establish long-term business relationships. First of all, we are talking about cooperation within the CIS.

The reason was that Russian was the language of international communication during the Soviet Union, and to this day it remains so. The Russian language continues to interest the modern world. According to Russian media reports, the number of citizens of the USA, France, Spain, Sweden, Finland, Austria and Korea who have recently begun to study Russian language and literature has increased several times.

Russian is not only the official language of the Russian Federation. It is one of the languages of the world, that is, it is a language that serves as a means of international communication between peoples of different countries. Within the two and a half thousand languages known in the world, the World Languages Club, called the most developed group of languages in the world, ensures international communication. Promotion as a world language is determined by the universal importance of the culture created in that language. The status of a language as a world language is legally ensured by recognition of its official or working language of international organizations or conferences (UN, UNESCO, etc.). For example, Russian is recognized as one of the six official languages of the UN, along with English, Arabic, Spanish, Chinese and French; on which the most important international treaties and agreements are written.

The Russian language is studied in most countries of the world. Teachers of the Russian language are united by the International Association of Teachers of Russian Language and Literature (MAPRYAL). Now the Russian language is still in fourth place in the world in terms of the number of people who speak it. At the top of the list are English (about 500 million people speak English as a first or second language, and more than 1 billion people speak English as a foreign language) and Chinese (which is spoken by almost 1,350 million people as a first language).

In third place is Spanish (this language is spoken by about 360 million people, including those spoken by about 335 million native speakers). Thus, the huge role of the Russian language in the modern world is determined by its cultural value, power and greatness. The rapid socio-political changes that have occurred in the world over the past decade have led to radical changes in the social structure of society, which, of course, could not remain without consequences for the development and functioning of the Russian language. A distinctive feature of the current state of the language situation in the world is that most language changes are associated with changes in society. The proportion of people who believe that language can ignore the norms of decency is constantly growing. The number of requests to foreigners has increased significantly, especially in large cities, there is a tendency to form an opinion about the «traditionality» of language etiquette and its uselessness in modern communication. The culture of the language and the general culture of the press, radio and television staff has fallen sharply. Many linguistic errors and gross deviations from the norms of linguistic culture are translated.

Modern free behavior on air in relation to language leads to a higher voice, speed of speech, increased articulation tension and excessive emotionality of conversation with the viewer, and also often leads to the use of vulgar, dangerous speech epithets and metaphors. In all social and age groups, the level of linguistic culture has decreased. This leads to gross errors in the field of computer typing and translation of printed publications, in particular newspapers, which makes it clear that today the rules of translation among the population have been abolished. Society is increasingly paying attention to the speeches of politicians; their mistakes are recorded in the press and ridiculed. This is encouraging a new generation of politicians to take more responsibility for their speech and work on Facebook.

Conclusion The intensive technical re-equipment of citizens' everyday life can be described as a technical revolution, and this is primarily due to the widespread use of modern household and office equipment, mainly foreign-made in everyday life. Computers, video cameras, new generation televisions, faxes, copiers, household appliances, foreign cars - all this has led to the emergence of many new terms and words in the Russian language. At the same time, many instructions for cars imported from abroad and driving records recommend learning a foreign language, mainly English. High-quality modern communications - cell phones, computer communications, etc. lead to a reduction in written communication, and the share of telephone communications and technical means of communication increases. This leads to a decrease in the literacy level of the population, especially young people. For the same reason, the amount of reading fiction, especially highly artistic literature, is decreasing.

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THE PLACE OF THE RUSSIAN LANGUAGE AMONG OTHER LANGUAGES OF THE WORLD

Abstract. The article is devoted to the study of the dynamics of language processes in the modern world. The trends in the development of the world language space are considered. English continues to be a kind of «lingua franca» of the world community in the era of globalization, but other languages are also entering the world arena. The Russian language has always been the language of intercultural communication due to the multiculturalism of Russia. However, the vector of transformation of his role has changed several times over the past fifteen years. Currently, it is regaining lost positions in the field of international education, remaining significant not only in Russia and neighboring countries, but in Europe, Asia and America. In general, studying the Russian language should go in conjunction with mastering the cultural characteristics of the Russian communicative style and lead to the formation of intercultural competence.

Key words: linguistic space, cultural space, English language, Russian language, international education, intercultural competence.

Language is not only the most important means of communication between people, but also a means of cognition that allows people to accumulate knowledge, passing it on from person to person and from generation to generation. The totality of achievements of human society in production, social and spiritual activities is called culture. Therefore, we can say that language is a means of its development and assimilation by each member of society.

Russian is one of the most widely spoken languages in the world. Around 250 million people around the globe speak it. In terms of prevalence, the Russian language ranks fifth in the world, second only to Chinese, English, Spanish, Hindi and Urdu.

The emergence of language is not only a linguistic issue, it also affects anthropology, that is, a set of other sciences that study man, his origin, development, existence in the natural and cultural environments.

There are a number of assumptions about the origin of language, but none of them can be confirmed by facts due to the enormous remoteness of the event in time. They remain hypotheses because they cannot be observed or reproduced experimentally.

The first hypothesis, the onomatopoeia hypothesis, comes from the Stoics and received support in the 19th-20th centuries. The essence of this theory is that

a «languageless person,» hearing the sounds of nature, tried to imitate these sounds with his speech apparatus.

The hypothesis of interjections comes from the Epicureans, opponents of the Stoics, and lies in the fact that primitive people turned instinctive animal cries into interjections accompanying emotions, from which all other words supposedly originated. The reason for the emergence of this hypothesis by supporters comes down to the expressive function. But there is a lot in language that is not related to expression.

From the middle of the 18th century, the «social contract» hypothesis emerged. It was based on some opinions of antiquity and largely corresponded to the rationalism of the 18th century. This assumption is that in later eras of language development it is possible to «agree» on certain words, especially in the field of terminology.

The trouble with all hypotheses is that the question of the emergence of language is taken in isolation, without connection with the origin of man himself and the formation of primary human teams. Engels, Humboldt and Baudouin de Courtenay believed that vertical gait was both a prerequisite for the emergence of speech and a prerequisite for the expansion and development of consciousness in human development. The various assumptions that have existed for a long time about the origin of language from gestures also do not explain anything and are untenable.

For a long time, linguists believed that the question of the origin of language is resolved only after abstracting it from the processes of speech activity. Therefore, from the middle of the 19th century, they regularly compared the patterns of different languages and constructed diagrams to reduce them to a form that could be considered their common ancestor. The totality of such forms was called the proto-language. Languages that have the same ancestor began to be called genetically related. This is how the concepts of Indo-European, Semitic-Hamitic, Niger-Kordofanian and many other families arose. Using the same method, the Indo-European, Semitic-Hamitic, Kartvelian, Uralic, Dravidian and Altaic families were raised to the next level of proto-language. They began to be called Nostratic (from the Latin word nostrum - ours) - one of the macrofamilies. Then hypotheses appeared about the further expansion of the Nostratic community of languages.

The hierarchy of languages goes deeper. The Nostratic macrofamily, along with the Afroasiatic, Sino-Caucasian, Austric, and Amerindian, is part of the Borean hyperfamily. There are also many isolate languages - these are isolated languages that are not part of any known language family.

The set of processes leading to the generation of words and other units in real language practice is called human speech activity. By studying its model, one can understand how an individual's verbal behavior is carried out. To find out how a language arose, it is necessary to study the speech activity of a group. Using

its model, one can describe the processes that stood at the origins of language and consciousness.

Based on the experience accumulated in Indo-European studies and Oriental studies, processes are identified that characterize human speech activity from the point of view of the structure of his speech organs and the communicative tasks he solves. Observation of the dynamics of their development (weakening, disappearance, conservation, emergence, strengthening) makes it possible to depend on them for all sorts of changes that occur in languages and lead to transformations of both individual words or grammatical categories, and the language system as a whole. Together with it, verbal consciousness is transformed, the philosophical (physical) picture of the world becomes different, because the concepts underlying it are based on language, its inherent categories and the way of reflecting objective reality learned from childhood. By describing the stages of development of speech activity «from zero» to today, from elementary processes to increasingly complex ones, we receive a tool for penetrating the secrets of the process of forming the categories of our thinking, which allows us to travel back to the time when they were created and follow them along the entire path of their development. By replacing the retrospective movement with a prospective one, we have a means of penetrating into the future and making a scientific forecast about what our language will be like tomorrow, how the categories of thinking will evolve, in what direction the philosophical or physical picture of the world will be rebuilt, what methodologies will determine the development of science in the new millennium.

The closer to the beginning, the more features in linguistic processes that are common to different language families, the more generalized the laws that govern them, the less discrete the continuum of linguistic reality recorded by the brain. The procedure for searching for the «zero point» in the history of a proto-language, the concept of the transition from the initial stage to subsequent ones, the new knowledge that is introduced into science by the discovery of the «language zero,» the problems that arise after this discovery - all this can be interesting not only for dedicated to linguistic matters. The materials studied show that speech activity originated in the form of exclamations of multifocal formation, not divided into individual sounds and not differentiated depending on the position of the speech organs or the nature of breathing. Both the meaning and form of these exclamations were as general as possible, not comparable with the concepts that exist today.

The initial situation is most easily represented by an analogy with a picture of a «walking» baby. The speech childhood of humanity, which appears before the reader, is not much different from the first year of life of its individual representative (as they say, phylogeny coincides with ontogenesis). Over time, amorphous, from a sound and semantic point of view, the primary element entered into the process of division: instead of one, two appeared, of which four appeared, etc., until all the words and morphemes that make up modern languages were

formed. The initial unit of the content plan is the concept of chaos; its binarization leads to the concepts of light and darkness; on their basis, a opposition is formed between the air-water substance and the solids; from the contradictions that arose within the concept of the firmament, the definition of the firmament of heaven as opposed to the firmament of the earth is formed, the binarization of the concept of an air-water substance results in the separation of the concept of water from the concept of in the spirit, etc., etc. - until All elements of our dictionary are not created. Behind this process one can easily discern the biblical story of the creation of the world. The dualization of concepts is based on the need to navigate in time and space (outside a person and inside his brain). In parallel with the semantic ones, sound processes occur in the history of language: from the syncretic polyfocus, which denoted the concept of chaos, a vocal component is isolated in contrast to the consonantal one, each of them is divided into two (for example, vowels begin to be contrasted by row and rise, consonants - by place and method of formation) etc., - right up to the current variety of phonemes. The speech organs (the specifics of their development and functioning) are responsible for this process. The discussion about the origin of languages is very interesting and exciting, but it can continue indefinitely, so it will not fit into the scope of the abstract.

Therefore, we will focus on a more detailed study of language families, in particular the Indo-European family.

In conclusion, it should be noted that the question has now become extremely relevant: «Will Russian be one of the world languages in the future?»

Currently, in terms of prevalence, the Russian language still ranks fifth in the world. If existing trends continue, by 2015 the number of people who know Russian to varying degrees will decrease to 212 million people, and by 2025, the number of people who know Russian in various countries of the world will decrease to approximately 152 million people.

The Russian language has great internal potential for further development and a rich cultural heritage. However, Russian is the only one of the 10-12 leading world languages that has been steadily losing its position in all major regions of the world over the past 15 years. And in the next 20 years, this negative trend will continue unless appropriate measures are taken to effectively support the Russian language and culture within the country, in the near and far abroad.

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*Khidirov D.
senior teacher*

Tashkent University of architecture and civil engineering

THE LEVEL OF PHYSICAL PREPARATION OF THE EFFICIENCY OF TECHNICAL-TACTICAL ACTIONS OF FOOTBALL PLAYERS

Annotation. This article studied the scientific and practical experience of domestic and foreign scientists in the field of sports on the technical, tactical and physical development of young football players, scientific and theoretical information presented in the sources of scientific literature. Modern methods of developing the technical, tactical and physical fitness of young players through the analysis of the training process were used in the research process. Scientific and theoretical ideas on the control of the level of readiness were put forward and scientific research was carried out, the results of the research were analyzed comparatively and appropriate conclusions were drawn.

Key words: speed strength, technical and tactical training, one-year training, experimental group, control group, educational training.

The football game requires a lot of physical and technical preparation from the player, to act with accuracy during the entire game, because the lack of physical preparation leads to the ineffective completion of all actions on the field, to the unsuccessful performance of the team.

However, the problem of optimizing training sessions during the competition was left aside. We all know that in sports games, especially in football, there is a specific importance of planning training and conducting it on the basis of a specific program. The fact that football competitions consist of many «tours» means that we must have an optimal program to ensure that the players are at a high level of physical and psychological preparation for each «tour».

Due to the density of «tours» during the competition, players are required to develop high level of physical fitness and technical-tactical skills in order to prepare for each «tour».

Relevance of the study:

The problem of training talented and competitive football players with high technical skills, wide physical and functional capabilities determines the need to develop alternative and effective pedagogical technologies.

A number of experts have recommended their method to increase the quickness of the players. But currently, in the training of football players, little attention is paid to the aspects of quick-strength qualities related to technical-tactical actions. First of all, it is necessary to pay great attention to the correct distribution of training loads and the development of quick-strength qualities from the initial stage of specialization. In order for players to play at a high level, it is necessary to develop various systems of the body.

The purpose of the research: The purpose of the scientific research: to improve the efficiency of the technical-tactical training of young football players during the annual training period and to study its connection with physical training.

In order to determine the dynamics of the effectiveness of the technical and tactical actions of young football players during the annual training period, observations were made during training sessions and friendly matches.

Players of two groups participated in the research. 20 young players will participate in each group. In order to determine the physical and technical-tactical preparation of students, their physical and technical-tactical preparation was checked through special tests and the following standards were adopted:

Before the study, control tests on the physical training of the experimental and control groups were taken and the following results were obtained.

the experimental group 30m before the study. to run 4.8 seconds on average, 400 meters 69.2 seconds, standing long jump 186 centimeters, 30m. 5.3 in the run with the ball, 77 in the footy, 29.7 meters in the long kick with the right foot and 24.4 meters in the kick with the left foot. They also showed a result of 14.2 meters when throwing the ball from the outside (Table 6).

Control group Participants 30m before the study. to run 4.9 seconds on average according to the standard of control, 68.6 seconds for running 400 meters, standing long jump 187 centimeters, 30m. 5.3 in the run with the ball, 72.7 in the footy, 29.3 meters in the long kick with the right foot and 24.3 meters in the kick with the left foot. They also showed a result of 14.2 meters in throwing the ball from the outside. (Table 1)

Tests for the assessment of physical and technical-tactical training of the experimental group before the study (Table 1)

No	FISH.	30 m. run to	400 m run	Standing long jump	Running with a ball for 30m	Playing the ball on foot	Kick the ball far		AUT
1	Abdikayumov Doston Utkir O'li	5.0	70	190	5.3	51	30	20	14
2	Artikov Beknur Adil O'Li	4.8	70	180	5.4	62	28	22	13
3	Aslanov is the son of Kamron Shahobjon	4.7	72	185	5.5	95	31	23	15.5
4	Asrorov is the son of Dilshodjon Umidjon	4.9	70	190	5.2	80	26	31	14
5	Azimova Ozoda Ergashevna	5.0	69	180	5.1	60	31	21	13
6	Babilova Iroda Zafarovna	5.1	70	190	5.4	63	32	28	14
7	Bakhtiyorov is the son of Samandar Yodgorbek	4.9	68	200	5.3	92	27	30	14
8	Boyko'Ziyev is the son of Khosilbek Kamal	4.9	69	180	5.3	60	26	23	13
9	Boyto'Rayev Otabek Khudoynazar Oguly	4.7	70	185	5.6	63	30	20	15
10	Chuliyev is the son of Nazarbek Muzafar	4.8	70	180	5.4	97	38	19	15.5
11	Ismailov Ibrahimjon Israiljon Oghli	4.9	69	180	5.1	53	29	25	13.5

12	Jo'Rayev Dyorbek Abdurashid's son	4.9	68	180	5.0	85	26	31	15
13	Mamadaliyev, son of Shukhratbek Dilshodbek	4.8	67	185	5.3	112	29	26	13
14	Mamatkarimova Sevinch Rakhmatilla Girl	4.7	69	200	5.1	101	30	20	15.5
15	Makhmudjonov Faizirakhman Shuhratjon Og'li	4.8	70	180	5.5	58	31	18	15
16	Mukhtarov is the son of Faizulla Akmaljan	4.7	71	190	5.6	90	32	27	14.5
17	Narziyev Ozodbek Husniddinovich	5.1	68	195	5.3	101	30	25	14
18	Nasirova Munisakhan Shukhratovna	4.9	67	180	5.1	89	30	22	14.5
19	Obidov Davronbek, son of Kasimjon	4.8	69	180	5.5	102	29	26	15.5
20	Raupov Shukhrat Bakhodirovich	5.0	68	190	5.4	78	30	31	13
X (Mean Value)		4.8	69.2	186	5.3	77	29.7	24.4	14.2

After that, in order to increase the efficiency of technical and tactical training in the study group during the annual training period, the ratio of technical-tactical exercises was increased in the planning of training hours, physical training exercises were added to match episodes, and in the experimental group, through this distribution, the training was trainings were conducted. After six months of training, we again received control norms from the players of the experimental group.

Tests for the assessment of physical and technical-tactical training of the control group before the study (Table 2)

No	FISH.	30 m. run to	400 m run	Standing long jump	Running with a ball for 30m	Playing the ball on foot	Kick the ball far		AUT
1	Abdikayumov Doston Utkir O'li	5.1	69	185	5.6	68	28	18	13
2	Artikov Beknur Adil O'Li	4.9	71	190	5.4	70	27	22	14
3	Aslanov is the son of Kamron Shahobjon	4.8	67	180	5.2	59	25	24	13.5
4	Asrorov is the son of Dilshodjon Umidjon	4.9	68	190	5.5	48	22	26	15
5	Azimova Ozoda Ergashevna	5.0	68	200	5.3	51	29	32	14
6	Babilova Iroda Zafarovna	4.9	69	185	5.1	62	31	28	13.5
7	Bakhtiyorov is the son of Samandar Yodgorbek	5.0	67	195	5.6	87	33	20	14
8	Boyko'Ziyev is the son of Khosilbek Kamal	4.9	70	190	5.3	99	31	26	15.5
9	Boyto'Rayev Otabek Khudoynazar Oguly	5.0	70	180	5.5	133	29	21	14
10	Chuliyev is the son of Nazarbek Muzafar	5.1	69	180	5.5	48	27	25	13
11	Ismailov Ibrahimjon Israiljon Oghli	4.9	68	195	5.4	59	32	24	14.5
12	Jo'Rayev Dyorbek Abdurashid's son	4.9	68	190	5.3	75	31	22	14
13	Mamadaliyev, son of Shukhratbek Dilshodbek	4.8	67	185	5.2	81	29	24	15
14	Mamatkarimova Sevinch Rakhmatilla Girl	4.9	69	200	5.0	72	28	22	16
15	Makhmudjonov Faizirakhman Shuhratjon Og'li	4.8	69	190	5.2	42	29	31	14
16	Mukhtarov is the son of Faizulla Akmaljan	4.9	68	180	5.1	44	33	24	15
17	Narziyev Ozodbek Husniddinovich	4.8	70	185	5.3	87	31	28	15
18	Nasirova Munisakhan Shukhratovna	5.0	71	180	5.4	129	32	19	14.5

19	Obidov Davronbek, son of Kasimjon	4.9	68	185	5.6	66	30	24	14
20	Raupov Shukhrat Bakhodirovich	4.7	67	190	5.5	74	29	26	13.5
X (Mean Value)			68.6	187	5.3	72.7	29.3	24.3	14.2

the experimental group 30m before the study., while the control average was 4.8 seconds, after the study it was 4.6 seconds, and the 400 meter run was 69.2 seconds before the study. 66.8 seconds after study, standing long jump 186 centimeters before study, 197 centimeters after study, 30m. 5.3 in running with the ball, 5.0 seconds after the study, 77 before the study in footwork, 108 after the study, 29.7 meters in the long kick with the right foot and 29.7 meters with the left foot 24.4 meters in the kick, 32.9 meters in the right leg and 27.4 meters in the left leg after the study. Before the study, the result of throwing the ball from the outside was 14.2 meters, and after the study, this indicator was 16.1 meters (Table 3).

Tests for the assessment of physical and technical-tactical training of the experimental group after the study (Table 3)

No	FISH.	30 m. run to	400 m run	Standing long jump	Running with a ball for 30m	Playing the ball on foot	Kick the ball far		AUT
1	Abdikayumov Doston Utkir O'li	4.8	66	200	5.0	89	35	24	16
2	Artikov Beknur Adil O'Li	4.6	67	190	5.2	97	33	26	14.5
3	Aslanov is the son of Kamron Shahobjon	4.6	68	200	5.3	130	32	28	16.5
4	Asrorov is the son of Dilshodjon Umidjon	4.7	68	200	5.0	180	30	35	16.5
5	Azimova Ozoda Ergashevna	4.8	66	190	5.0	160	36	27	15.5
6	Babilova Iroda Zafarovna	4.7	66	210	5.2	76	38	33	16.5
7	Bakhtiyorov is the son of Samandar Yodgorbek	4.8	67	215	5.0	130	31	33	18
8	Boyko'Ziyev is the son of Khosilbek Kamal	4.8	65	190	5.1	86	29	25	16.5
9	Boyto'Rayev Otabek Khudoynazar Oguly	4.5	67	200	5.0	78	32	24	16.5

10	Chuliyev is the son of Nazarbek Muzafar	4.7	68	190	5.2	105	36	22	17
11	Ismailov Ibrahimjon Israiljon Oghli	4.6	68	190	5.0	139	30	27	15
12	Jo'Rayev Dyorbek Abdurashid's son	4.8	67	205	4.8	78	28	34	16
13	Mamadaliyev, son of Shukhratbek Dilshodbek	4.6	66	190	5.0	167	31	28	15.5
14	Mamatkarimova Sevinch Rakhmatilla Girl	4.5	66	185	4.9	91	33	21	17
15	Makhmudjonov Faizirakhman Shuhratjon Og'li	4.6	67	200	5.2	90	34	19	16
16	Mukhtarov is the son of Faizulla Akmaljan	4.6	68	200	5.3	73	36	29	16
17	Narziyev Ozodbek Husniddinovich	4.7	69	200	5.2	363	32	33	17
18	Nasirova Munisakhan Shukhratovna	4.8	65	205	5.1	97	36	28	17
19	Obidov Davronbek, son of Kasimjon	4.6	66	190	4.9	107	34	24	15.5
20	Raupov Shukhrat Bakhodirovich	4.6	67	205	4.8	126	32	28	16
X (Mean Value)			66.8	197	5.0	108	32.9	27.4	16.1

Training in the control group was carried out unchanged and after 6 training sessions, we rechecked them through control standards. **The control group** exercised 30m before the study. They showed an average result of 4.9 seconds of running according to the control standard, but after the study, this indicator was 4.8 seconds. 68.6 seconds before the study in the 400 meters, 67.8 seconds after the study, 187 centimeters in the standing long jump, 191 centimeters after the study, 30m. in running with the ball was 5.3 seconds before the study and 5.2 seconds after the study. 72.7 in kicking the ball, 90.2 after the study, 29.3 meters in the right-footed long kick before the study and 24.3 meters in the left-footed kick, from the study then this indicator showed 30.8 meters in the right leg and 26.7 meters in the left leg. Before the study, the result of the throw was 14.2 meters, but after the study, this indicator reached 14.7 meters (Table 4).

According to the results of the study, the indicators of physical fitness increased in both groups compared to the initial results, but in the participants of the control group, these indicators increased at a low level, while in the research group, the results showed a significant increase. we can reach

Tests for the assessment of physical and technical-tactical training of the control group after the study (Table 4)

No	FISH.	30 m. run to	400 m run	Standing long jump	Running with a ball for 30m	Playing the ball on foot	Kick the ball far		AUT
1	Abdikayumov Doston Utkir O'li	5.0	68	190	5.4	80	30	21	14
2	Artikov Beknur Adil O'Li	4.9	69	190	5.2	105	29	22	14
3	Aslanov is the son of Kamron Shahobjon	4.7	67	185	5.1	145	29	27	14.5
4	Asrorov is the son of Dilshodjon Umidjon	4.9	67	190	5.4	135	26	30	15.5
5	Azimova Ozoda Ergashevna	5.0	68	200	5.3	170	32	35	14
6	Babilova Iroda Zafarovna	4.8	67	190	5.1	65	32	30	14
7	Bakhtiyorov is the son of Samandar Yodgorbek	4.9	66	200	5.4	89	33	25	15.5
8	Boyko'Ziyev is the son of Khosilbek Kamal	4.9	69	195	5.2	138	31	28	15.5
9	Boyto'Rayev Otabek Khudoynazar Oguly	4.9	68	185	5.4	100	31	24	14
10	Chuliyev is the son of Nazarbek Muzafar	5.0	68	185	5.3	70	28	26	14
11	Ismailov Ibrahimjon Israiljon Oghli	4.8	68	195	5.2	105	33	28	15
12	Jo'Rayev Dyorbek Abdurashid's son	4.8	67	200	5.1	89	32	24	14.5
13	Mamadaliyev, son of Shukhratbek Dilshodbek	4.7	66	190	5.2	90	30	25	15
14	Mamatkarimova Sevinch Rakhmatilla Girl	4.8	68	190	5.0	88	28	26	16.5
15	Makhmudjonov Faizirakhman Shuhratjon Og'li	4.7	69	195	5.1	50	31	32	15
16	Mukhtarov is the son of Faizulla Akmaljan	4.8	67	185	5.0	70	34	26	16

17	Narziyev Ozodbek Husniddinovich	4.8	68	190	5.1	40	33	29	15
18	Nasirova Munisakhan Shukhratovna	4.9	69	185	5.2	51	34	24	15
19	Obidov Davronbek, son of Kasimjon	4.8	68	195	5.2	45	31	24	14
20	Raupov Shukhrat Bakhodirovich	4.8	70	190	5.3	80	30	28	14.5
X (Mean Value)			67.8	191	5.2	90.2	30.8	26.7	14.7

Conclusion Special literature shows that the control of competitive activity of football players plays an important role in the process of training football players. Along with the assessment of individual technical-tactical actions, players determine the qualities of speed, strength, special agility, endurance and technical movement abilities. Based on the results of the analysis, a targeted impact can be made on various aspects of the player's training.

Technique training and its improvement depends on several factors, for example, the level of preparation of the players, the training period, the number of balls, the condition of the field and the meteorological conditions. Regular monitoring of movement training serves to consciously organize the work of the coach and is of great help to young players. Control and self-control instills a sense of freshness and self-confidence in the player.

Teaching and training methods of game technique should not contradict the essence of the game, on the contrary, it is necessary to take into account the requirements of the game. Exercises adapted to home situations and selected taking into account the players' obligations at home are very important, and training sessions should make up 50-60% of the training material.

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INTEGRATED APPROACH IN TEACHING FOREIGN LANGUAGES IN TECHNICAL HIGHER EDUCATIONAL INSTITUTIONS

Abstract. The article under discussion reveals integrated approach in teaching foreign languages in technical higher educational institutions. The author of the article considers that the use of integrated approach in teaching process leads to increased motivation for learning general subjects and a foreign language itself, and to the formation of readiness for professional activity in the context of integration processes in the economic, social and political spheres of life.

Keywords: vocational education, requirements, teachers, students, teaching methods, teaching methods and technologies, integration, educational process.

Introduction The modern system of vocational education and training requires constant updating and improvement, as the requirements for education are changing annually, technical means in the field of education are developing and new, modern means and technologies of education are appearing. In connection with these changes, approaches to teaching methods and technologies are also changing, and requirements for both teachers and students in terms of improving general and professional knowledge are increasing. This means that a modern teacher should be in constant search for new knowledge, use modern teaching methods and technologies and skillfully apply new technical means to enhance students' knowledge.

Main part. The article under discussion is devoted to methods and technologies of integrated classes, implementation of the principles of integrated method of teaching a foreign language (English) to the students of technical higher educational institutions. The concept of «integration», in its general meaning coinciding with the concept of «integrativity», means the process of combining individual parts into a single whole, which is subject to the laws of the relationship between the whole and its parts. The closest characteristics of integrativity may be integrity and mutual influence, and the property of integration is the principle of system formation. The Dictionary of Linguistic Terms defines «integration» as bringing languages closer to each other, leveling out their differences in the process of unification into one language. The word «integrated» in a New Glossary of Methodological Terms and Concepts (from Latin integer - whole) is defined as teaching that denies the division of knowledge into separate disciplines and is associated with a holistic perception of the surrounding world. Scientists state that the term «integrative» is in close

proximity to its synonym «wholeness», stressing the interest not in the external manifestation of wholeness, but in the more powerful reasons for the presence of this property. Integrative factors that preserve consistency are referred to as system-forming factors, the most important of which are heterogeneity and contradictory elements. Thus, «integration» is the process of combining the parts in science and the emergence of new concepts as a result of this process. If we apply the notion of «integration» to the subject of «a foreign language», we can say that in the classes of this discipline when applying the integrative approach, we can widely use examples from other fields of knowledge, other academic subjects. These can be extracts from history and literature texts, mathematical tasks, the use of maps, audio and video materials, etc. The examples used can not only arouse and maintain students' interest, but also have a positive impact on their outlook and motivation, increase their cognitive activity, contributing to the improvement of their knowledge and skills. The nature of integration is an object of consideration for many researchers. For example, V.A. Ergelhardt has defined three steps in integrating parts and a whole: a) a system of connections and relations between parts; b) when parts lose their initial identification qualities when they become part of a whole; c) new properties emerge in the integrating whole. Speaking about integration in the educational process, one cannot ignore the works of who examines the nature of interrelation of social and natural sciences, where the main thing, in his opinion, is not cooperation of independent partners, but mutual «sprouting». It is known that integrative processes in modern education imply the universalization of functions of each of its spheres, their systemic development, harmonization of relations between them. Each subsystem of the modern educational paradigm should thus increase the level of system integrity, which, in its turn, will lead to the formation of a global holistic system.

In accordance with the principle of communicative orientation, foreign language teaching is structured in such a way as to involve students in oral and written communication. In order to make such communication possible, a conducive environment is created in practical classes and extracurricular activities, such as classes of the Student English Communication Club, educational material is carefully selected and organized, possible situations and work techniques are thought through to stimulate communication. The learning tools always include authentic video, audio or printed material, and the tasks for the texts to be listened to or read are mainly communicative in nature, setting a communicative goal. Media can be integrated into language lessons in a variety of ways by developing activities based on radio programs, television shows, newspapers, and videos.

Thus, students' attention is focused not on the form of a statement, its lexical and grammatical content, but on the content, which, with little or no teacher intervention or supervision, ensures successful communication. Due to the existence of specific requirements for practical mastery of each type of speech activity in foreign language classes a certain distinction is made in teaching

listening, reading and writing (differentiated approach), which is expressed in the selection of special exercises contributing to the formation and development of the required skills and abilities, appropriate training tools and is considered when drawing up tasks of current and final control. Besides in the process of forming communicative competence in teaching various types of speech activity not only differentiated but also integrated approach is implemented: if any particular task or practical lesson in general is focused on a certain type of speech activity, a series of other tasks or lessons that are coming out to all its other types inevitably follows from them. In some cases, it is more appropriate to start with listening or reading instead of speaking, to learn language material or to introduce a new topic of conversation. The choice of receptive or productive types of speech activity is determined by the conditions under which one or another approach can ensure the greatest effectiveness and quality of teaching. The main methods of teacher's work in a foreign language classroom should include familiarization, practice and application, as well as control accompanying each main technological operation, including correction and evaluation.

Conclusion. Thus, the training of qualified specialists with knowledge of a foreign language and a broad worldview depends on the correct selection and organisation of each teaching material. When teaching a foreign language to students of technical higher educational institutions using the integrated method, the specifics of the method should be strictly taken into account. The introduction of integrated courses in the practice of foreign language teaching promotes communicative and cognitive motivation, which feeds the interest in mastering a foreign language. The leading role here should be that of teaching a foreign language as a means of communication, all aspects of which should be subordinated to communicative objectives. There is a definite relationship between communicative skills and integration. Integration is both the basis for the formation of communicative skills and the result of the implementation of communicative skills and the result of the implementation of communicative activities.

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Khudaiberdiev A.A., Ph.D.
associate professor
Jizzakh Polytechnic Institute
Academician of the Academy of Sciences TURON
Republic of Uzbekistan, Jizzakh

IMPROVING THE PROCESS OF PELLETING SEEDS IN COTTON GROWERS

Abstract. This article is aimed at improving the quality of panning and saving energy; instead of an additional element inside the drum, a thin sheet with staggered oval tubercles is attached around the circumference and mixing seeds with an adhesive mass, making a rotational movement along the inner circumference of the drum, they encounter tubercles that force them to turn left or right

Keywords. Cotton plant, drum, circumference, material, agricultural technology, tubercles, seeds, leaf, pelleting.

Seed pelleting is one of the stages of encrustation - complex production preparation of seeds, which includes treatment with fungicides for preventive purposes, treatment with growth stimulants, fertilizers and other plant protection agents. For inlaying, special drum-type industrial equipment, a paner or a granulator are used (the design principle is similar to a concrete mixer). When rotating, the device mixes the seeds and allows you to apply the desired compounds in strictly controlled doses evenly. With the help of adhesives, the seeds are coated with the necessary preparations and take on a spherical shape.

High-quality pelleted seeds are sown in the ground dry, since the shell of the granules dissolves when soaked. But when sowing, it is necessary to moisten the soil well. The treated seed always germinates several days later than conventional seeds, but during the growing season it quickly overtakes and outstrips traditional ones.

Experiments have proven that pre-sowing preparation is extremely important to protect the future crop from diseases and stimulate the growth of healthy plants. When using seed pelleting, the yield can increase by up to 15%, so this method is effective and popular.

In Uzbekistan, scientists from the Research Institute of Agricultural Mechanization (NIIMSH) were engaged in pelleting cotton seeds. They developed a device for pelleting cotton seeds that ensured the required flowability of the seeds.

The device consists of (Fig. 1): conveyor 1, sprayer 2, pipeline 3, working element 4, additional element 5, flange 6, support bearings 7, through shaft 8, pulley 9, mechanism for adjusting the position of additional element 10, lock 11, frame 13, unloading opening 14 and conveyor for receiving finished products 15.

The platter-drum device works as follows. The drum is installed relative to the horizon at an angle $\varphi=35-45^\circ$ and, using conveyor 1, unsown cotton seeds in the range of 100-120 kg are loaded. The electric motor is turned on, the drum begins to rotate, the unplanted seeds are soaked with liquid stimulants and adhesives with sprayer 2. After the seed shells are evenly soaked, they are treated with chemicals against diseases and insect pests.

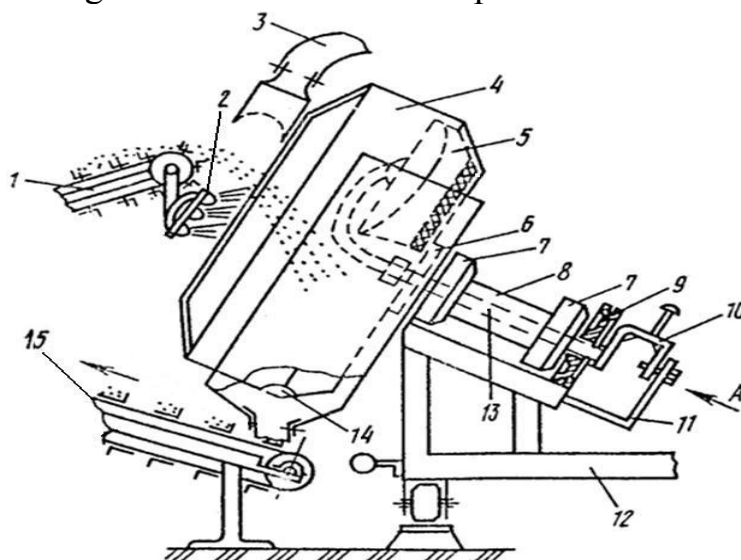


Fig1. Schematic diagram of the operation of a plate-drum pan.

After the chemicals are evenly distributed, the seeds are mixed with lignin. At the end of the process, the seed shells become smooth and have a round shape. At this time the process stops. The finished product is poured through opening 14 into conveyor 15 and then sent for drying.

The device may be suitable for farmers to prepare the daily required quantity of pelleted seeds. The disadvantage of this device is that due to the presence of an additional element inside the drum, some of the pelleted seeds are little involved in the process.

In order to improve the quality of panning and save energy, instead of an additional element inside the drum, a thin sheet with staggered oval tubercles is attached around the circumference. In the process of mixing the seeds with the adhesive mass, they make a rotational movement along the inner circumference of the drum and collide with tubercles, which force them to turn left or right. Continuing their movement, the seeds collide with the next tubercles and perform many rotational movements, which ensure high-quality mixing of seeds with chemicals. The installation diagram of parabolic elements is shown in Fig.2

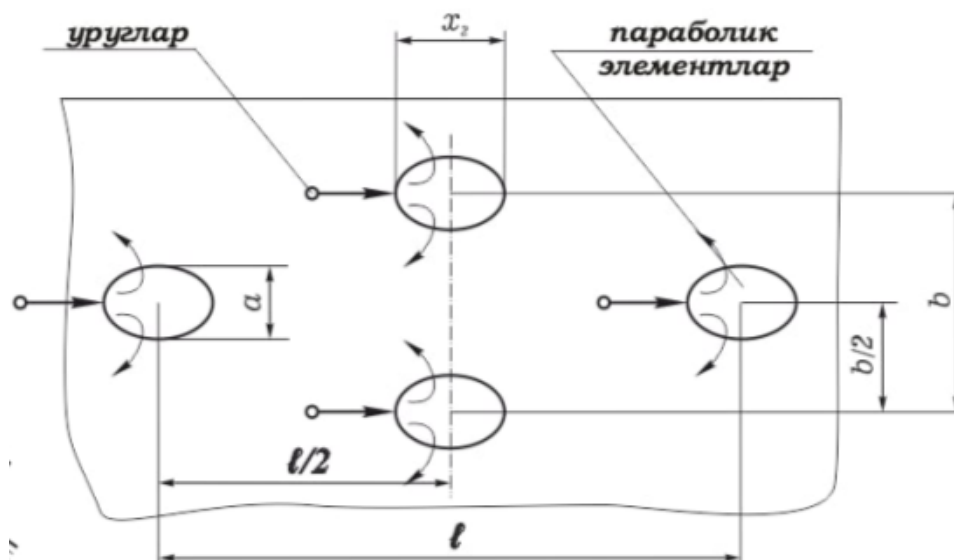


Fig-2. Diagram of the arrangement of parabolic elements along the inner circular surface of the drum.

Sheet parameters: sheet thickness $t=1$ mm; width $B=40$ cm; length $L= nD = 3786$ mm. Two options for the radius of the parabolic element $R=6$ mm and $R=8$ mm; distance between elements around the drum circumference $l=30$ mm; width $b=45$ mm. The radius of the pan is $R = 0.7$ m; the drum is installed to the horizontal plane at an angle $\beta = 400$; drum speed $n = 25$ 1/min; electric motor power $N = 30$ kW. The parameters of the dragator are scientifically proven by scientists from the Scientific Research Institute of Agriculture.

The test gave the following results.

Radius curvature (mm)	Power (kW)	Time process (min)	Power wasted (kW)	Time existing process options (min)	Power existing process options (kW)	Difference (kW)	(%)
6	30	14	6,9	17	8,4	1,5	17,0
		16	7,8	17	8,4	0,6	7,41
8	30	14	6,95	17	8,4	1.45	7,57
		16	7,85	17	8,4	1.5	7,46

Conclusions:

- during panning, all seeds participate in the process;
- during the process, the seeds do not hit hard objects, no damage occurs;
- no additional element is required, as a result of which metal and electricity are saved;

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*Khudoyorov L.N.
Head of the Department of Software Engineering
Karshi branch of the Tashkent University
of Information Technologies named after Muhammad al-Khwarizmi
Noraliyeva S.S.
student
Karshi branch of the Tashkent University
of Information Technologies named after Muhammad al-Khwarizmi
Baxronova N.S.
student
Karshi branch of the Tashkent University
of Information Technologies named after Muhammad al-Khwarizmi*

DEVELOPMENT OF DIGITAL ECONOMY AND ITS ROLE TODAY

Annotation. In this thesis, a broader understanding and thoughts about «Digital Economy» are given to people working with information technologies, the development of «Digital Economy» and its importance today, how it is created and how it works, its beneficial and harmful aspects are highlighted.

Keywords: Digital economy, digitalization, e-commerce, innovation, communication technologies, business digitalization, economic factors.

Currently, all economic transactions conducted within the global network encompass the digital economy, making it a general term for all economic matters. The digital economy is defined as economic activity resulting from billions of online connections between people, businesses, devices, data, and processes that occur daily. In other words, it is an economy based on digital and computational technologies. Therefore, there is no single definition of the digital economy. For this reason, the digital economy includes activities driven by the web and other digital communication technologies, primarily encompassing business, economic, social, and cultural activities.

The world is witnessing a digital revolution, and at its core lies the ever-expanding realm of information and communication technology (ICT). This intricate web of digital infrastructure is not just connecting people across the globe; it's driving economic growth, shaping national security, and defining international competitiveness. The United States, a leader in technological advancement, demonstrates the strategic edge gained through ICT. Its dynamic industry, strong economic foundation, and vibrant innovation ecosystem have positioned the country at the forefront of the digital economy. This success story underscores the importance of investing in ICT infrastructure and fostering a culture of innovation for any nation aiming to thrive in the digital age. The growth of the digital economy is intrinsically linked to the development of the ICT

industry. As the foundation for digital goods and services, ICT serves as a reliable predictor of economic progress.

This connection is evident across developed, developing, and emerging economies, highlighting the universal impact of ICT. Interestingly, a transformative shift is occurring within the ICT sector itself. Developed countries, in particular, are experiencing a transition from hardware-centric production to a software-driven service sector. This evolution is fueled by the widespread adoption of mobile technology, increased connectivity, and the growing popularity of mobile e-commerce and digital platforms. For nations striving to maintain global competitiveness and accelerate their digital economy, prioritizing ICT investments is crucial. Focusing on 5G technology, network development, and research and development (R&D) will be key drivers of progress. These advancements can further integrate the ICT industry with less technologically intensive sectors, creating a ripple effect of economic growth. The future of the digital economy is intertwined with the continued development of emerging technologies. Cloud computing, robotic automation, artificial intelligence (AI), deep learning, the Internet of Things (IoT), and 5G are paving the way for new frontiers in the digital landscape, particularly in the realm of cyber-physical systems.

The digital economy, a term encompassing all economic activity facilitated by digital technologies, is rapidly transforming the world. At the heart of this transformation lies the ever-expanding realm of Information and Communication Technology (ICT). From the internet and mobile networks to sophisticated software and cutting-edge devices, ICT forms the bedrock of the digital age. Countries at the forefront of ICT development, like the United States, enjoy a strategic competitive advantage. Their dynamic industries, robust economic foundations, and thriving innovation ecosystems allow them to leverage the full potential of digital platforms. This translates into economic growth, job creation, and improved quality of life for their citizens. Developing 5G networks, supporting R&D initiatives, and promoting digital literacy are essential steps in this direction. These efforts will not only enhance economic competitiveness but also improve access to essential services and empower individuals to participate fully in the digital age. The future of the digital economy is bright, with ICT continuing to drive innovation and progress. Emerging technologies such as AI, blockchain, and quantum computing hold immense potential to revolutionize various sectors, from healthcare and finance to manufacturing and transportation. However, navigating the challenges associated with this rapid technological advancement is crucial. Issues like cybersecurity threats, data privacy concerns, and the digital divide require careful consideration and collaborative solutions. As we move forward, ensuring equitable access to ICT resources and promoting responsible innovation will be essential to harnessing the full potential of the digital economy. By embracing these principles, we can create a future where

technology serves as a force for good, empowering individuals and communities across the global

Conclusion: The digital revolution is not a distant possibility, it is the reality of our present and the defining factor of our future. Nations that recognize the power of ICT and actively invest in its development will be well-positioned to thrive in the ever-evolving digital landscape. The race is on, and the stakes are high. As we move forward, embracing the opportunities and navigating the challenges of the digital age will be essential for ensuring sustained economic growth, national security, and global competitiveness.

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*Khudoyorova N.
english teacher
Navoi Regional Law school
1st foundation doctoral student
Navoi State Pedagogical Institute
Uzbekistan, Navoi*

BASIS OF EMERGENCE OF JADID LITERATURE

Annotation. In the history of the development of our literary and artistic thinking, the role and place of literature of the 19th-early 20th centuries, which is completely new in essence and content, is special. This article reflects on the genesis of jadid literature and the jadids who contributed to it.

Key words: jadid, literature, poetry, Turkestan, movement, people, work, nation, life.

The 20th century was a period that was distinguished not only in the life of the Uzbek people, but also in the life of the whole world, with its rich diversity. By this century, the speed of life processes has increased tremendously. The picture of the exchange of social phenomena has accelerated to an unimaginable level. At the beginning of this century, the peaceful life of the people of Turkestan, which has been going on for several centuries, turned upside down. The renewal of ideas, the introduction of technical advances, and the acceleration of information exchange have changed the lifestyles of Turkestan. Until that time, our national literature did not go shoulder to shoulder with our national life. Although our literature was not completely separated from life, the problems of social life could not completely engulf it. By the 20th century, literature came closer to life. Not satisfied with this, he started trying to change his life. The invasion of Russia and its colonial policy based on violence made the already difficult life of Turkestan people even more difficult. Due to social injustice and legal inequality, the owners of the land, who worked tirelessly day and night, were getting poorer, and the invaders who were engaged in robbing and deceiving them were getting richer. Due to poverty, vices such as pride, ignorance, subordination, and indifference were forming among the Turkestan, which could not but disturb creative intellectuals who are aware of their nation's past and have hope for its future. At the end of the 19th century and the beginning of the 20th century, the movement of national revival began not only in Turkestan, but also in many colonies of the world. People of opinion who want to eliminate social injustice and change unjust regimes believed that in order to change the poor state of the nation and the difficult way of life, it is necessary to educate the people first. It was understood that nothing can be achieved without awakening the nation from ignorance and creating a desire for development in the spirit of the people. It

became clear that the provision of enlightenment to the nation should be organized in a completely different way, both in terms of quality and speed.

It was realized that one cannot be satisfied only with knowledge that affects the soul and improves morals, and that it is necessary to thoroughly study the basics of science and technology. For this, new teaching methods had to be introduced. In this way, the Enlightenment views, which began to form in Turkestan from the second half of the 19th century, became the basis for the emergence of the Jadidism movement by the beginning of the 20th century. The word «Jadid» means «new» in Arabic and means a person who strives for development. Just as the enlightened people turned literature into a tool for fighting against ignorance, modernists also turned fiction into a tool to save the people from ignorance and colonial oppression. It should be said that the Enlightenment and the struggle were different events not only in terms of the time of occurrence, but also in terms of the goals they set for themselves. For example, enlighteners aimed not to change the existing situation, but to reform it, to raise the educational level of the people. For Jadids, enlightening the masses was only a stage on the way to the main goal. The goal was to make the homeland prosperous, to liberate the nation, and to restore the former glory of Turkestan. The Jadids, who started the work in the 90s of the 19th century by establishing new method schools, soon planned to establish a free, democratic independent state in Turkestan. The creation of Turkestan autonomy in 1917 was a serious attempt to implement this plan. By the beginning of the 20th century, the development of mass media and the improvement of international relations allowed the enlightened representatives of the nation to compare the life of their people with the life of the developed nations of the world. As a result of the adoption of the Manifesto on freedom of speech and press in Russia in October 1905, the development of the Uzbek press was made possible to some extent. If the first and only newspaper in the Uzbek language was the «Gazette of the Turkistan Region» published in 1870, the number of periodicals increased significantly after 1905. Between 1905 and 1917, 22 newspapers and 8 magazines were published in the Uzbek language. This situation had a serious impact on the way of thinking of the people of the nation.

The daily press caused the expansion of the scope of updates in Uzbek literature. Industrial printing of the book was also a strong factor in the development of the socio-aesthetic thinking of the nation. Jadid literature was completely aimed at awakening the nation. The heroes of this literature were not the representatives of the upper class or figures irradiated with divine power, as in the previous period, but ordinary people who came from the masses, returned to them, and therefore had a greater opportunity to influence the people. Jadid writers tried to express new themes in new genres and through new images. Another important point is that the Jadid writers

they were not only creators, but also public figures. They tried to awaken the nation not only with their pen, but also with their social, political and

educational actions. If the Enlightenment brought new topics to the centuries-old national literature, the moderns introduced new genres such as drama, novel, story to Uzbek literature. The leading field of Jadid literature was poetry. Jadid poetry, which was sharply different from Uzbek classical poetry in terms of weight, language, style, and ideology, laid the foundation stone for the development of a new direction in Uzbek literature of the 20th century. The fact that the Uzbek people lived in an environment of ignorance and ignorance at the beginning of the century, indifference to changes in social life, science, culture, and technology, being stuck in the vortex of everyday household problems and falling into a morally helpless situation is not only a matter of modern journalism, but also of poetry. determined the ideological direction. Jadids tried to hold up a mirror to the people's people with their poems, to reflect their strange and poor life, soulless state and pessimistic mood in this mirror.

Avloni published during 1909-1917 with poems and parables in the collections «First Teacher», «Second Teacher», especially «Adabiyot yahud national poems» consisting of six parts, a strong impetus to the formation of modern poetry. gave Prose takes an important place in the modern literature, which tried to bring the literary movement closer to the requirements of the time and the spiritual needs of the people.

Both of these works serve as a model for many works of modern writers, which were later illuminated by the light of enlightenment. Hamza's work «New happiness or national novel» (1915) is also dedicated to the issue of education of the young generation. In this work, Hamza describes the complicated life path of a young man named Olimjon, because he was brought up in a modern school and in the bosom of an intelligent mother, he was not only loyal to his family members and patrons, but also «necessary for a foreign nation». he also pays special attention to his growth as a person. Despite the fact that the scholar's father was the son of a rich man, he did not enjoy the source of enlightenment behind his ignorant father, because of this, he entered the path of disbelief, lost his property and became a person who made a living from gambling.

Olimjon, who has found his way and happiness in life, returns even this unhappy father to the bosom of the family and fulfills his filial duty perfectly. In the work, Hamza compared the fate of an uneducated father with an educated son, tried to reveal the great importance of science in the fate of man and society, and to spread the ideas of enlightenment among the masses of the people. In the mid-1910s, with the stories «Juvonboz» and «Uloqda», Abdulla Qadiri also contributed to the emergence of modern prose. Thus, for the first time in modern Uzbek literature, Jadid prose was able to provide good examples of realistic stories, narratives, essays, and essay-dialogue genres, and in the process, it prepared the conditions for the formation of the modern Uzbek literary language. One of the important features of Jadid literature is that representatives of this literature not only wrote works in one type of artistic creation, but also created

works in other adjacent types. Not content with this, they founded the art of theater and introduced dramaturgy to Uzbek literature for the first time.

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ECONOMIC EFFECTIVENESS OF USING BIOTECHNOLOGY IN AGRICULTURE

Abstract. Biotechnology in agriculture plays an important role in the development of this industry. From the point of view of modern science, biotechnology in agriculture is the industrial use of biological processes and agents, based on the production of highly effective forms of microorganisms, cell cultures and tissues of plants and animals with specified properties.

Key words: biotechnology in agriculture, genetically modified crops, development of new markets, innovations in agriculture, genome mapping, agricultural engineering.

Agriculture plays a key role in ensuring food security and economic development in many countries. With population growth and climate change, it is becoming increasingly important to improve agricultural productivity and reduce its negative impact on the environment. One of the innovative areas that can improve the productivity and sustainability of agriculture is biotechnology.

Advantages of using biotechnology in agriculture:

1. Increased productivity: Biotechnology allows the creation of plant and animal varieties with improved characteristics, such as resistance to diseases, dead wood and pests, as well as increased yields.

2. Reduced costs: The use of biotechnology can reduce the cost of plant protection and fertilizer use, as resistant plants require fewer chemical treatments.

3. Resource Conservation: Through more efficient use of water, soil resources and energy, biotechnology contributes to more sustainable agricultural production.

4. Stimulating innovation and developing new markets: The development of biotechnology in agriculture contributes to the emergence of new sectors of the economy, such as the production of seeds and planting material with high added value.

Economic efficiency of using biotechnologies:

1. Increasing income for agricultural producers: By increasing productivity and reducing costs, agricultural producers can earn higher incomes.

2. Reducing dependence on imports: The development of our own high-tech agriculture allows us to reduce dependence on imported food products.

3. Attracting investment and infrastructure development: Expanding the use of biotechnology in agriculture attracts investment, promotes the development of research centers and the creation of modern infrastructure.

4. **Reduced environmental impact:** More efficient use of resources and reduced need for chemical fertilizers and pesticides help reduce environmental pollution.

Overall, the use of biotechnology in agriculture has great potential to improve the productivity, sustainability and economic efficiency of the industry. However, to successfully realize this potential, support from government, investors and the scientific community is required.

Biotechnology plays a key role in improving the productivity and sustainability of agriculture and reducing its negative impact on the environment. Here are some specific examples of the cost-effectiveness of using biotechnology in agriculture:

1. **Increasing yields using genetically modified (GM) varieties:**

- Example: GM soybeans and maize, resistant to certain diseases and pests, allow agricultural producers to reduce pesticide costs and increase yields.

2. **Reducing the cost of plant protection using biological preparations:**

- Example: The use of microorganism-based bioinsecticides to control pests allows agricultural producers to reduce the cost of chemical pesticides and at the same time increase crop yields.

3. **Increasing plant resistance to stressful conditions:**

- Example: The development of drought-resistant wheat varieties allows for stable yields even under unfavorable climatic conditions.

4. **Creation of varieties with extended shelf life and transportation:**

- Example: GM tomatoes, which are more resistant to damage and remain fresh longer, allow farmers to reduce product losses during transportation.

5. **Development of new markets and innovations in agriculture:**

- Example: The creation of genetically modified plant varieties with special properties (for example, flowering plants with changed flower color) contributes to the development of new markets and increased demand for agricultural products.

All of these examples demonstrate how the use of biotechnology in agriculture can provide practical benefits to farmers by reducing costs and increasing productivity. In addition, the use of biotechnology contributes to economic development by attracting investment, creating new jobs and stimulating innovation in the agricultural sector.

Advanced biotechnologies in agriculture are used throughout the world, and some of the most prominent examples include:

1. **Genetically modified (GM) crops in the USA:** The USA is the largest producer and consumer of GM agricultural products. They have successfully used GM corn, soybeans, cotton and other varieties to increase yields, disease and pest resistance, and improve product quality.

2. **Biologicals in Europe:** Some European countries such as Germany, the Netherlands and France have successfully used microorganism-based biologicals to protect plants from pests without the use of chemical pesticides.

3. Breeding resistant varieties in Asia: Southeast Asian countries such as India and China are actively developing resistant varieties of rice, wheat and other crops that can withstand drought, salinity and other stress conditions.

4. Application of genome mapping in Latin America: In some Latin American countries, such as Brazil and Argentina, research is being carried out to map and analyze the genomes of crop plants, which allows more efficient development of new varieties with desired properties.

5. Use of Agricultural Engineering in Africa: Many countries in Africa are using agricultural engineering to develop crop varieties that are resistant to diseases, pests and stress conditions such as drought and low soil nutrients.

These examples demonstrate that advanced biotechnologies are widely used in agriculture around the world and play an important role in increasing crop yields, crop sustainability and improving the livelihoods of agricultural producers.

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*Kodirov B.X.
mustaqil izlanuvchi
«Qurilish materiallari, buyumlar va konstruksiyalarini ishlab chiqarish»
kafedrasining katta o‘qituvchisi
Farg‘ona politexnika instituti
O‘zbekiston Respublikasi, Farg‘ona shahri*

**AMMIAKLI SELITRA VA UNING SUYUQLANMASINI MAHALLIY
NOAN’ANAVIY TABIIY MINERALLAR (BENTONIT VA GLAUKONIT
UNLARI) BILAN QO‘SHIB, ISHLOV BERISH ORQALI XOSSALARI
YAXSHILANGAN AMMIAKLI SELITRA OLISH JARAYONINI
O‘RGANISH**

Annotatsiya. Azotli mineral o‘g‘itlar orasida ammiakli selitra (AS) yetakchi o‘rinni egallaydi, chunki u ozuqa moddalarining yuqori miqdordaligi va azotning ammoniy va nitrat shakllarining muvozanatli tarkibiga ega balastsiz arzon o‘g‘it.

Ammiakli selitraning keng ko‘lamda foydalanishini cheklaydigan asosiy kamchiliklar fiziologik kislotalilik, gigroskopiklik, yopishqoqlik (slejivayemost) qobiliyati, granularning mexanik mustahkamligi yetarli emasligi, termik beqarorlik va portlash xavfining yuqoriligi. AS – bu yonishga moyil, ba’zi tashqi omillar ta’siri ostida o‘zi portlaydigan oksidlovchi modda. Muhim kamchiliklaridan, saqlash va tashish vaqtida o‘g‘itning fizik-kimyoviy va mexanik xususiyatlarida salbiy o‘zgarishlarga olib keladigan polimorfik shakl o‘zgarishidir.

Kalit so‘zlar: ammiakli selitra, ammiakli selitraning suyuqlanmasi, ammoniy sulfat eritmasi (40-45%), mahalliy noan’anaviy tabiiy minerallar (bentonit va glaukonit uni), statik mustahkamlik, yopishqoqlik (slejivayemost), mikroelementlar, yaxshilangan xossalarga ega ammiakli selitra.

*Kodirov B.Kh.
independent researcher
senior teacher
department "Production of construction materials, products and
constructions"
Fergana Polytechnic Institute
Republic of Uzbekistan, Fergana city*

**STUDY OF THE PROCESS OF AMMONIOUS NITRATE PROCESSING
WITH IMPROVED PROPERTIES BY ADDING AMMONIOUS
NITRATE AND ITS LIQUIDATION WITH LOCAL**

UNCONVENTIONAL NATURAL MINERALS (BENTONITE AND GLAUCONITE FLOURS)

Abstract. Ammonium nitrate (AS) takes the leading place among nitrogenous mineral fertilizers, because it is a low-cost, ballast-free fertilizer with a high amount of nutrients and a balanced composition of ammonium and nitrate forms of nitrogen.

The main disadvantages that limit the wide use of ammonium nitrate are physiological acidity, hygroscopicity, viscosity (slejivayemost) ability, insufficient mechanical strength of granules, thermal instability and high risk of explosion. AS is a flammable oxidizing substance that explodes under the influence of some external factors. One of the important disadvantages is the change of polymorphic form, which causes negative changes in the physico-chemical and mechanical properties of the fertilizer during storage and transportation.

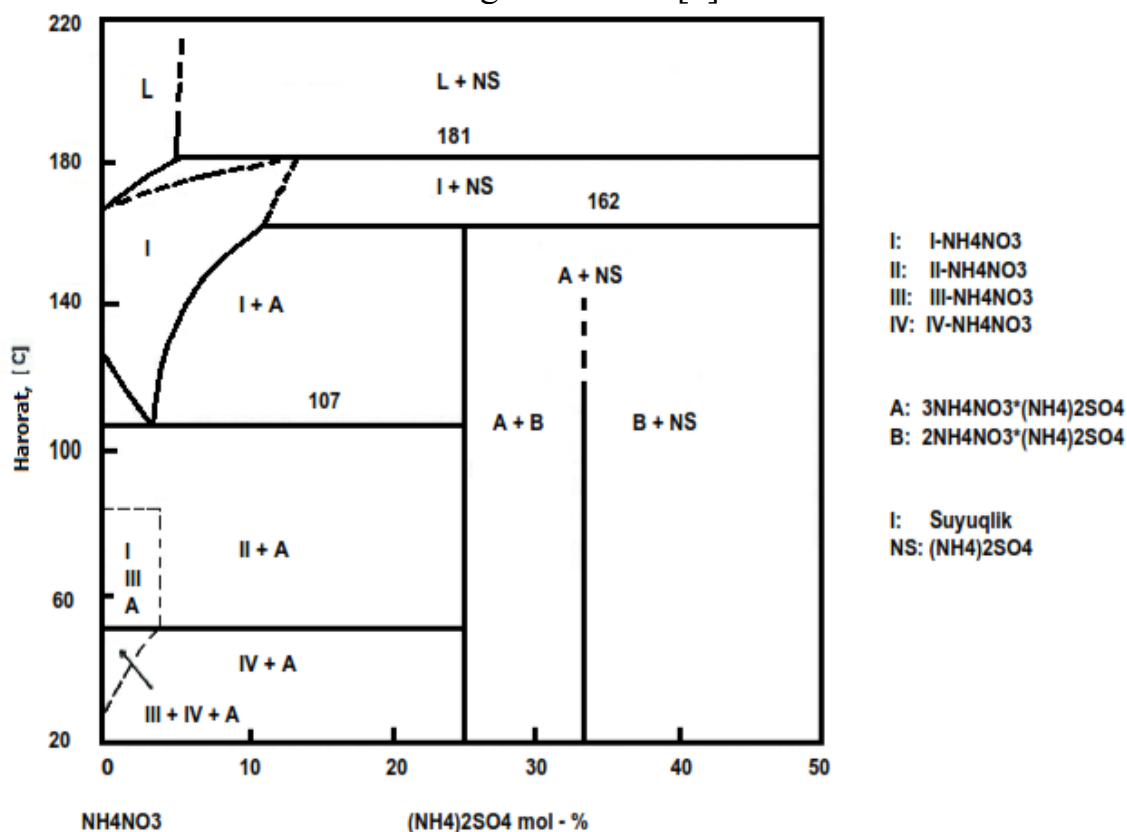
Keywords: ammonium nitrate, ammonium nitrate liquefaction, ammonium sulfate solution (40-45%), local unconventional natural minerals (bentonite and glauconite flour), static strength, viscosity (slejivayemost), trace elements, ammonium nitrate with improved properties.

Tajribani olib borish. Bog'lovchi modda sifatida $(\text{NH}_4)_2\text{SO}_4$ ning 40-45%li eritmasidan foydalanildi. 1 tonna tayyor mahsulotga 25-30 kg (2,5-3,0%) miqdorida sarf me'yorlari qabul qilingan. Quyida bog'lovchi bilan qisman kompleks tuzlar hosil qilishi to'g'risida ma'lumotlar keltirilgan.

Ammoniy sulfat qo'shilishi donalarning mustahkamligini oshiradi va ularni 0,6% gacha namlik bilan ishlatishga imkon beradi. Ammoniy sulfat tuzlar nisbatiga qarab 2: 1 ($2\text{NH}_4\text{NO}_3 \cdot (\text{NH}_4)_2\text{SO}_4$) va 3: 1 ($3\text{NH}_4\text{NO}_3 \cdot (\text{NH}_4)_2\text{SO}_4$) bo'lgan qo'sh tuzlarni hosil qiladi [1].

1-rasmdagi faza diagrammasi termal tadqiqotlar asosida qurilgan. Diagrammada sof ammiakli selitranning erish nuqtasi 5 %_{mol} ammoniy sulfat bilan taxminan 180°C dan oshdi, ammoniy sulfat soviganida kristallanadi [2]. Ammiakli selitra 181°C da I shaklida kristallanadi. Ammiakli selitranga qo'shimcha ammoniy sulfatning 140°C da 5 %_{mol}. va 162°C, tarkibida 10 %_{mol}. qo'shilishi 3 $\text{NH}_4\text{NO}_3 \cdot (\text{NH}_4)_2\text{SO}_4$ hosil bo'lishiga olib keladi. Oxirgi harorat oshib ketganda, qo'sh tuzlar anionlar va sulfatlarga bo'linadi. Sovutishda I-fazadan II-fazaga o'tish 124°C o'rniga 107°C haroratda sodir bo'ladi. Keyingi sovutishda III-fazaning mavjudligi yo'qoladi va 51°C haroratda II-fazadan IV-fazaga to'g'ridan-to'g'ri o'tish sodir bo'ladi. O'tish harorati ammoniy sulfat tarkibiga qarab 32 dan 51°C gacha o'zgaradi. Xuddi shunday, I-fazadan II-fazaga o'tish harorati 124 dan 107°C gacha pasayadi. Odatda, ohak-ammiakli selitrada $\text{IV} \leftrightarrow \text{II}$ o'tishni faollashtirish uchun qo'shimchani 0,1 dan 2,0% gacha ishlatish kerak, ammo sof ammiakli selitra uchun ko'proq miqdorda bo'lishi talab qilinadi [3, 4, 5]. Taxminan 6% ammoniy sulfat qo'shilsa, $\text{IV} \leftrightarrow \text{III}$ o'tish sodir bo'lmaydi. IV-dan III-gacha bo'lgan davrda ammoniy sulfat konsentratsiyasining 2 dan 6%

gacha pasayishi kuzatiladi, bu esa IV-dan II-gacha bo‘lgan o‘tish jarayonining to‘xtatilishiga olib keladi. Rentgen tekshiruvlarida ammoniy nitrat IV panjarasining deformatsiyasi (d_{111} 3,080 Å dan 3,060 Å gacha kamaydi), bu IV→metastabil IV→II fazadan o‘tishga olib keldi [6].



1-rasm. NH₄NO₃-(NH₄)₂SO₄ tizimining fazaviy diagrammasi

20 dan 60°C gacha bo‘lgan haroratda termosikllanish dastlab metastabil shaklda bo‘lgan qo‘sh tuzlarning qayta kristallanishiga olib keladi. Qayta kristallanish IV fazani barqarorlashtiradi va keyingi termal inertsiya II fazaga o‘tishni ta‘minlaydi. Suv o‘tishlarga salbiy ta‘sir ko‘rsatadi, ammoniy sulfat tarkibining ikki baravar ko‘payishi IV→II o‘tishining kinetik konstantasini ikki kattalik tartibiga va shuning uchun ammoniy nitratning kinetik barqarorligiga kamaytiradi [7]. Ohak-ammiakli selitrada ammoniy sulfat kristallar o‘rtasida tutashuvlar hosil qiladi va shuning uchun donalar ushbu tutashuvlar mavjud bo‘lganda asl shaklini saqlab qoladi [8].

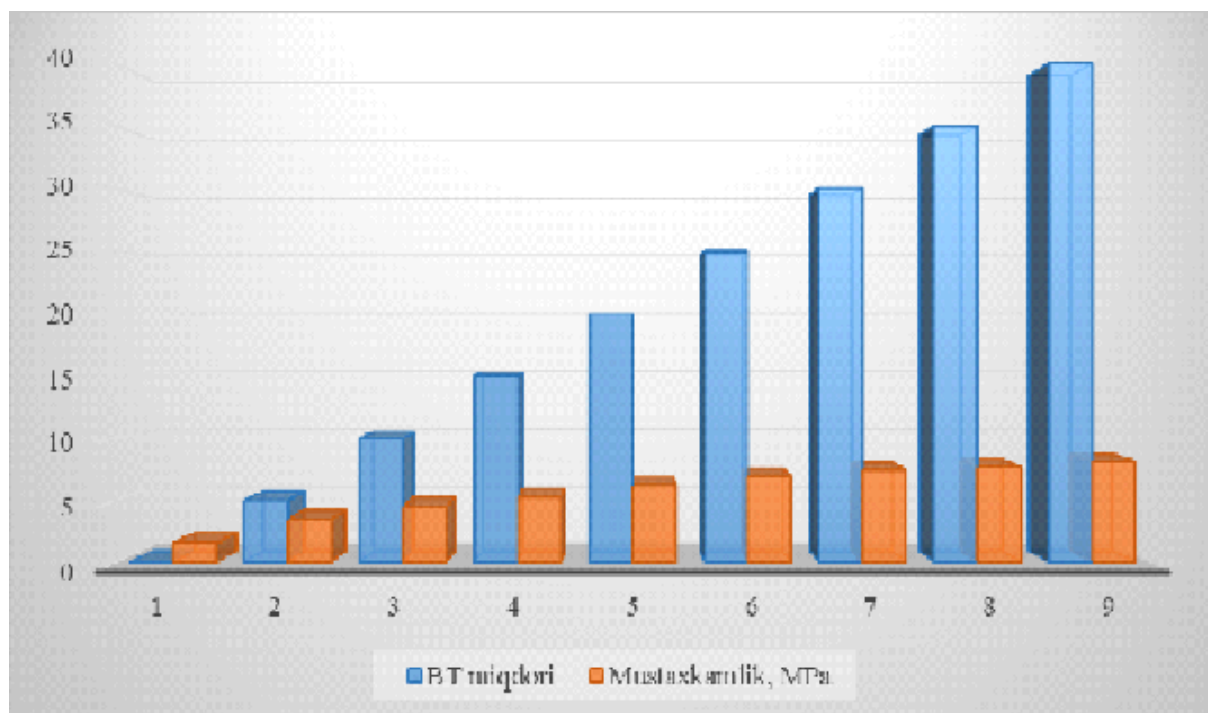
Olib borilgan natijalar shuni ko‘rsatadiki, ammiakli selitra (AS) tarkibiga bentonit (BT) qanchalik ko‘p kiritilsa, mahsulot donalari shunchalik mustahkam bo‘ladi, glaukonit (Gl)da bu ko‘rsatkich birmuncha o‘zgacharoq [9]. Agar standart ammiakli selitra (AS) donalarining mustahkamligi 1,59 MPa bo‘lsa, AS: BT=(95-70): (5-30), bu ko‘rsatkich 3,45 dan 7,47 MPa gacha ko‘tariladi. Donalar mustahkamligiga eng katta qiymatli ta‘siri - AC: BT = 70: 30 bo‘lganda erishiladi

va donalarning mustahkamligi 7,47 MPa ga teng bo‘ladi. Agar glaukonit uni qo‘shilganda bu ko‘rsatkich birmuncha past, lekin standart ASga nisbatan ancha yuqori, ya‘ni AS: Gl = (90-70): (10-30), bu ko‘rsatkich 1,02 dan 2,42 MPa gacha ko‘tariladi. Donalar mustahkamligiga eng katta qiymatli ta‘hiri - AC: Gl = 70: 30 bo‘lganda erishiladi va donalarning mustahkamligi 4,43 MPa ga teng bo‘ladi (1-jadval).

Ammiakli selitra va uning suyuqlanmasiga mahalliy noana‘naviy tabiiy mineral – bentonit (Log‘on koni) qo‘shish orqali olingan mineral o‘g‘itning tarkibi

1-jadval

AS: BT og‘irlik nisbati	Mahsulotning pH ko‘rsatkichi	N, %	K ₂ O, %	CaO, %	MgO, %	Fe ₂ O ₃ , %	Al ₂ O ₃ , %	SiO ₂ , %	Donalarning mustahkamligi, MPa
100: 5	6,80	32,76	0,21	0,06	0,08	0,21	0,75	3,05	3,45
100: 10	7,10	31,27	0,67	0,08	0,12	0,32	1,18	4,72	4,52
100: 15	7,23	29,91	1,32	0,12	0,17	0,47	1,70	6,83	5,27
100: 20	7,31	28,67	1,60	0,14	0,22	0,56	2,15	8,37	6,27
100: 25	7,43	27,52	1,74	0,16	0,24	0,67	2,45	9,68	6,96
100: 30	7,50	26,46	1,88	0,18	0,27	0,75	2,76	10,71	7,47
100: 35	7,68	25,48	2,01	0,20	0,33	0,93	3,33	12,84	7,71
100: 40	7,70	24,57	2,16	0,24	0,37	1,01	3,74	14,89	8,16

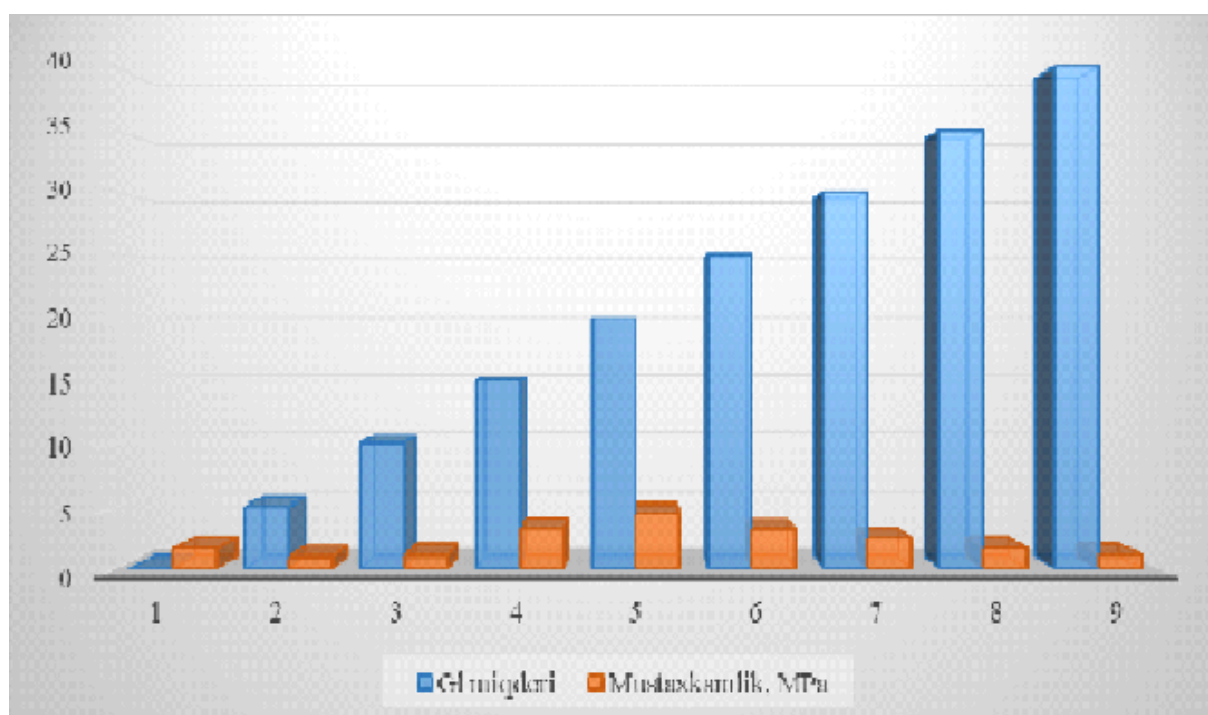


1-diagramma. Bentonit qo‘shimchasi miqdorining tayyor mahsulot mustahkamligiga ta‘hiri

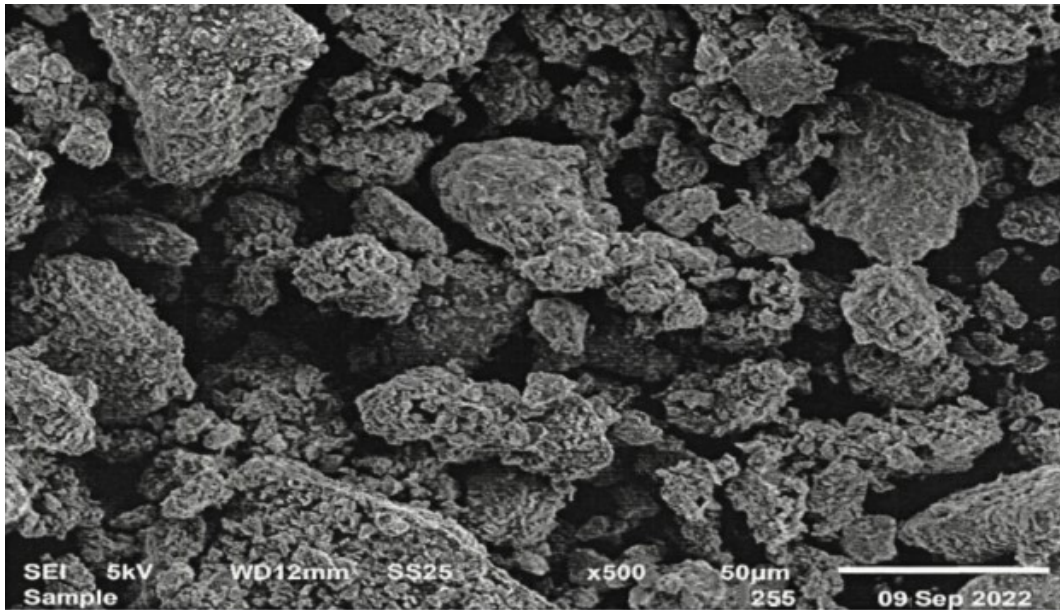
Ammiakli selitra va uning suyuqlanmasiga mahalliy noana'naviy tabiiy mineral
– glaukonit (Changi koni) qo'shish orqali olingan mineral o'g'itning tarkibi

2-jadval

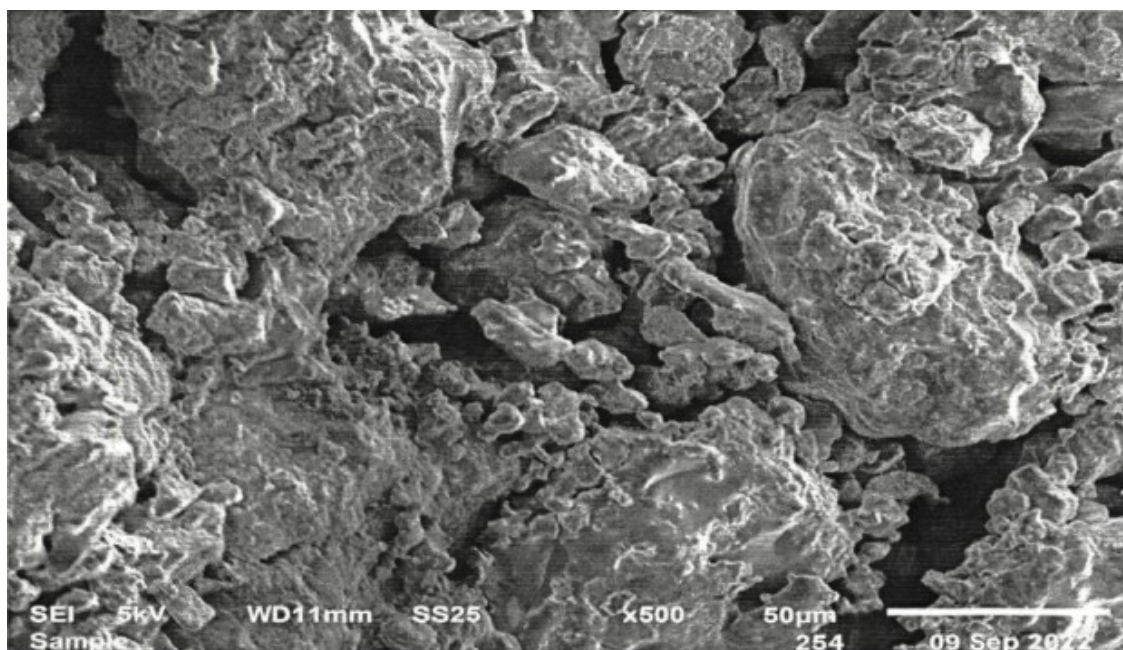
AS: Gl og'irlik nisbati	Mahsulotning pH ko'rsatkichi	N, %	K ₂ O, %	CaO, %	MgO, %	Fe ₂ O ₃ , %	Al ₂ O ₃ , %	SiO ₂ , %	Donalarning mustahkamligi, MPa
100: 5	6,46	32,76	0,172	0,032	0,01	0,323	0,61	0,561	0,89
100: 10	6,49	31,27	0,34	0,064	0,02	0,646	1,22	1,122	1,02
100: 15	6,53	29,91	0,52	0,096	0,03	0,969	1,84	1,683	3,27
100: 20	6,58	28,67	0,69	0,128	0,04	1,292	2,45	2,244	4,43
100: 25	6,62	27,52	0,86	0,161	0,05	1,615	3,06	2,805	3,22
100: 30	6,67	26,46	1,03	0,193	0,06	1,938	3,67	3,366	2,43
100: 35	6,72	25,48	1,21	0,225	0,07	2,261	4,28	3,927	1,62
100: 40	6,78	24,57	1,38	0,257	0,08	2,584	4,89	4,488	1,04



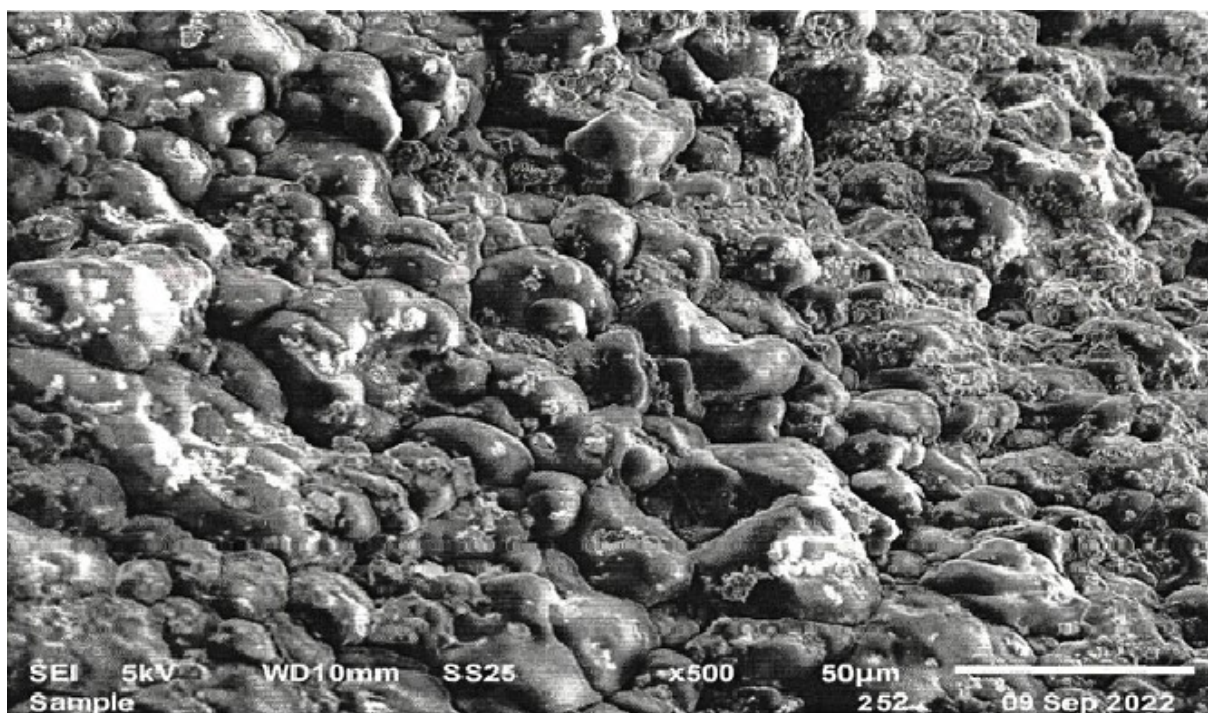
2-diagramma. Glaukonit qo'shimchasi miqdorini tayyor mahsulot mustahkamligiga ta'siri



3-rasm. *Aralashtirish orqali (AS: BT = 100: 20 nisbatdagi) olingan namuna donalarining yuzasi 500 marta kattalashtirilgantasviri*

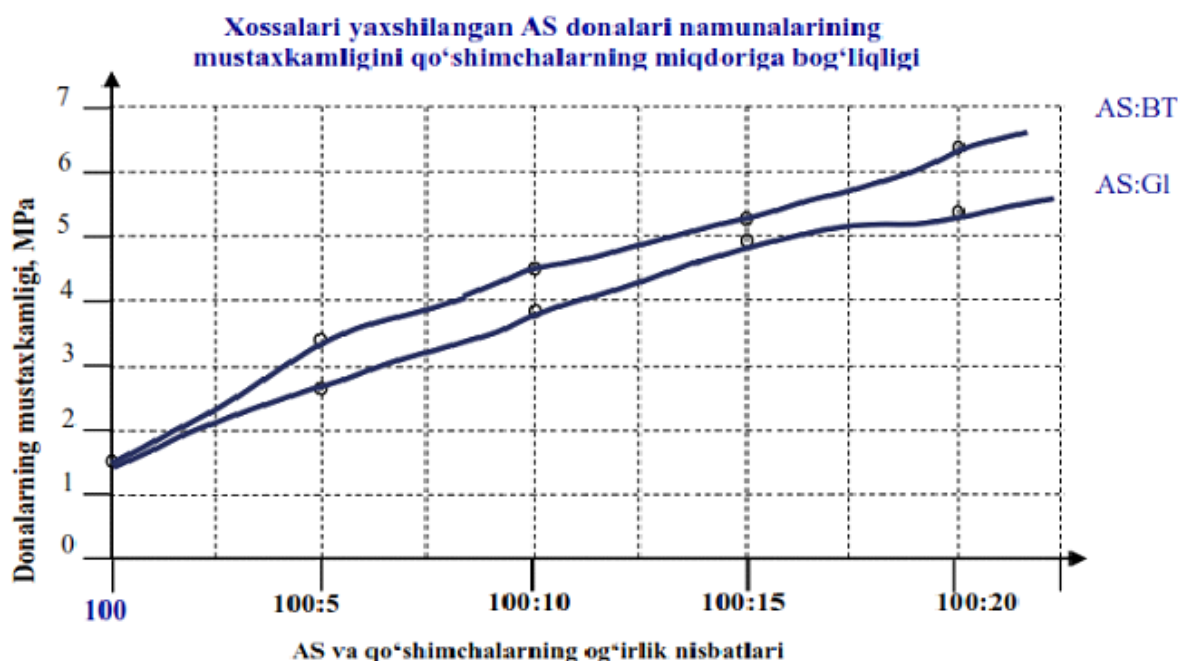


4-rasm. *Purkab berish (AS: BT = 100: 20 nisbatdagi) orqali olingan namuna donalarining yuzasi 500 marta kattalashtirilgan tasviri*

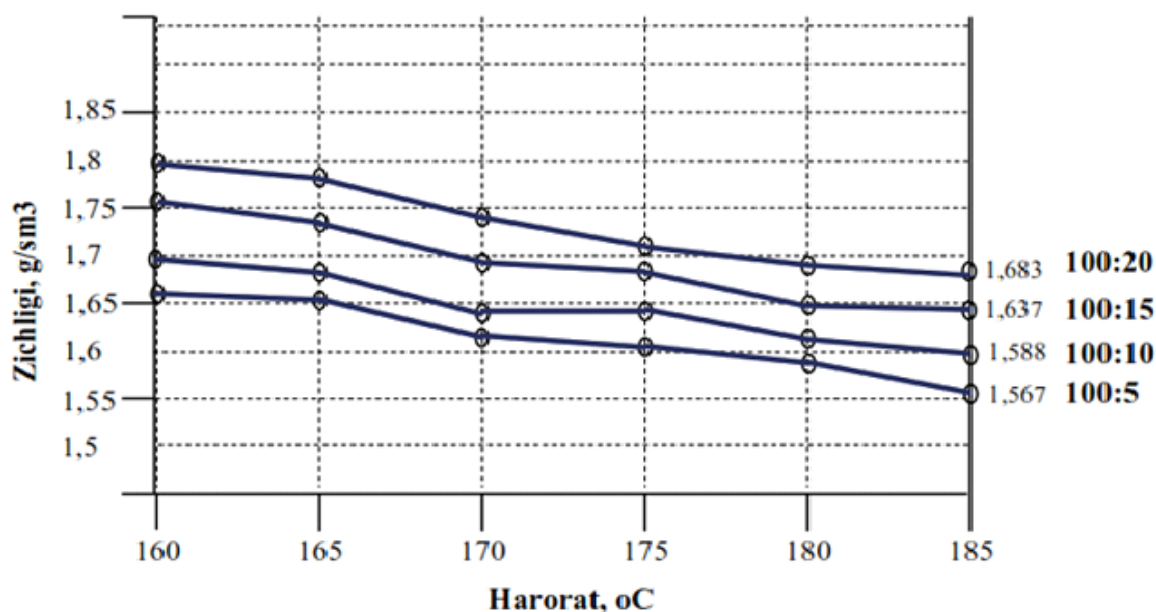


5-rasm. *Suyuqlanmaga (AS: BT = 100: 20 nisbatdagi) qo‘shish natijasida olingan namuna donalarining yuzasi 500 marta kattalashtirilgan tasviri*

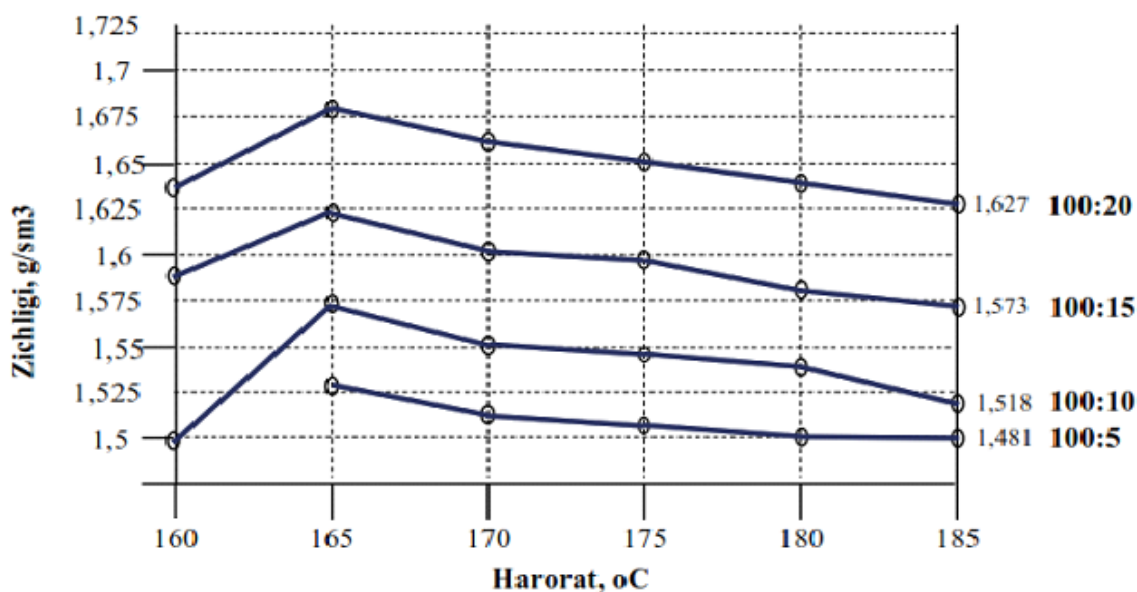
Tadqiqot natijalari shuni ko‘rsatdiki, 170°C haroratda va boshqa teng sharoitlarda qotishma zichligi va yopishqoqligi kiritilayotgan qo‘shimchalar miqdorining oshishiga to‘g‘ri proporsional bo‘ladi (6-8-rasmlar).



6-rasm. *Olingan namunalarning mustahkamligini qo‘shimchalar miqdoriga bog‘liqligi*



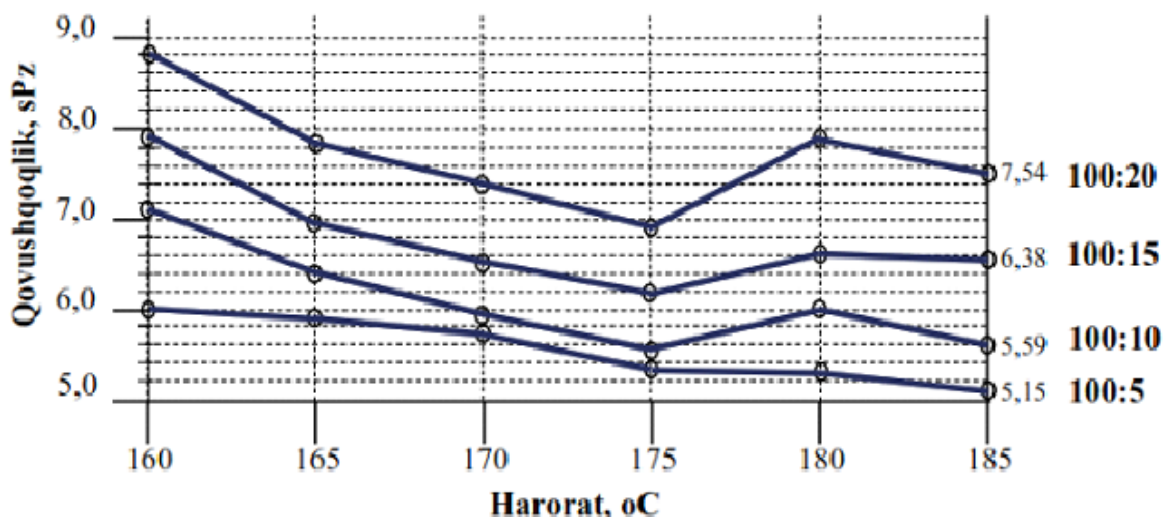
Ammiakli selitranning Log'on bentoniti bilan ishlov berilgan namunalari suyuqlanmalarining zichligini haroratga bog'liqligi



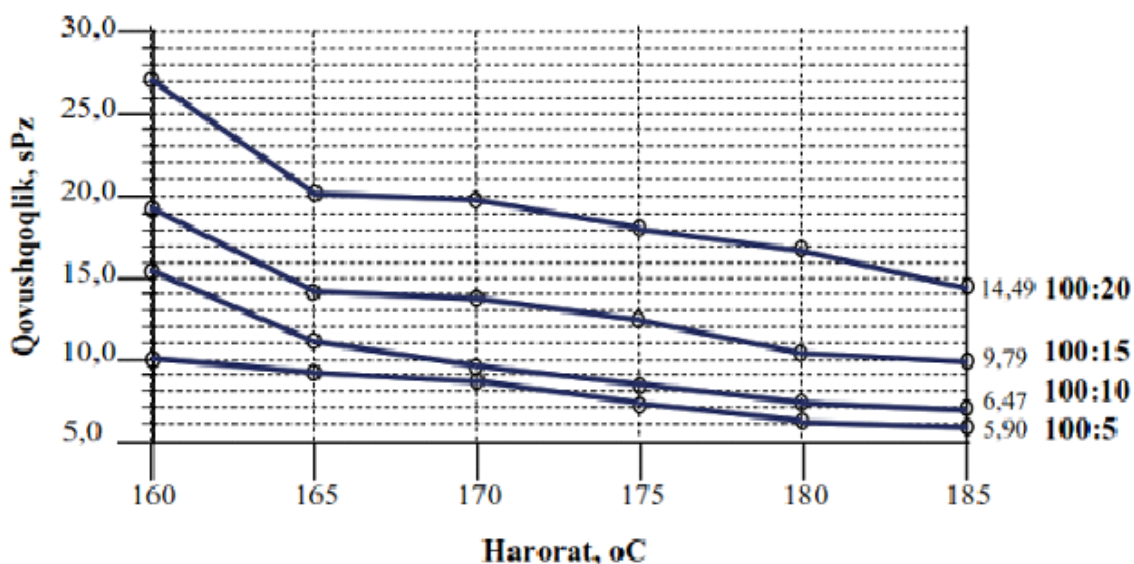
Ammiakli selitranning Changi glaukoniti bilan ishlov berilgan namunalari suyuqlanmalarining zichligini haroratga bog'liqligi

7-rasm. Qo'shimchalarning namunalari zichligiga ta'siri.

Navbatdagi, AS: BT = 100: 20 nisbatda olingan namunaga 160-185°C harorat intervalida (8-rasm) gi reologik xususiyatlarining o'zgarishi, ya'ni qovushqoqlik harorat o'zgarishiga ko'proq bog'liq, suyuqlanmalarining zichligi unchalik bog'liq emas. Shuning uchun haroratning 25°C ga ko'tarilishi zichlikning 6,9% ga, qovushqoqlikni esa 16,7% ga pasayishiga olib keladi.



Ammiakli selitranning Changi glaukoniti bilan ishlov berilgan namunalari suyuqlanmalarining qovushqoqligini haroratga bog'liqligi



Ammiakli selitranning Log'on bentoniti bilan ishlov berilgan namunalari suyuqlanmalarining qovushqoqligini haroratga bog'liqligi

8-rasm. Qo'shimchalarning namunalari qovushqoqligiga ta'siri.

Ushbu bog'liqlik bentonit misolida eng aniq namoyon bo'ladi, masalan, kimyoviy toza ammiakli selitra bilan solishtirganda AS suyuqlanmasida qo'shimcha (bentonit va glaukonit)lar miqdorining 5,0 dan 20,0% (og'irligi bo'yicha) gacha ko'payishi, (boshqa barcha narsalar teng) uning zichligining 3,2-5,61 va 3,2-6,5% gacha va qovushqoqlik 15,6-41,0% gacha oshishiga olib keladi.

Namunalarning to'kma zichligi, qo'shimchalarning turidan qat'iy nazar deyarli bir xil – 1,06-1,10 g/sm³, sochiluvchanligi esa bir xil - 100%. Mahsulot

donalarining mustahkamligi 3,70 MPa dan ortiq, kaliy tuzlari bundan mustasno bo'lib, u 1,70 MPa ga teng.

Bentonitli va glaukonitli o'g'it namunalarning fizik-kimyoviy va mexanik xossalari o'rganilgan. Namunalarning to'kma zichligi unchalik farq qilmaydi va 1,04-1,11 g/sm³ oralig'ida bo'ladi. Barcha namunalar 100% sochiluvchanlikka ega, ularning oquvchanligi 42 soniyadan oshmaydi, tabiiy qiyalik burchagi 31-44Å ga teng.

Xulosa. Shuni ta'kidlash kerakki, zichlik va qovushqoqlikning sezilarli darajada oshishiga qaramay, tadqiqot namunalarning suyuqlanmalari harakatchan holatga va yetarli oquvchanlikka ega bo'ladi.

Olingan ma'lumotlarga va sanoat xavfsizligi qoidalariga asoslanib, biz ammiakli selitra xususiyatlarini samarali yaxshilashni ta'minlaydigan bentonit qo'shimchasining miqdoriy tarkibini 20%_{og'} qabul qilib oldik.

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*Kurbanova D.S.
O'qituvchi, Jizzax politexnika instituti
Bozorboyeva N.
Bosimova M.
Talaba, Jizzax politexnika instituti*

QURILISH SHISHALARINI ISHLAB CHIQRISHDA MAHALLIY XOMASHYOLARNING QO'LLANILISHI

Annotatsiya. Ushbu maqolada shisha ishlab chiqarishda mahalliy xomashyolarning qo'llanilishi va ularning tarkibi, qurilish shishasi xususiyatlari, qurilish shishasi turlari, assortimenti, ishlatilishi, ularning sifatiga quyiladigan talablar va ishlab chiqarish texnologiyalari bayon etilgan.

Kalit so'zi: qurilish shishasi, qattqlik, shaffoflik, mo'rtlik, ohaktosh, kvarts qumi, soda.

*Kurbanova D.S.
teacher
Jizzakh Polytechnic Institute
Bozorboyeva N.
Bosimova M.
student
Jizzakh Polytechnic Institute*

USING OF LOCAL RAW MATERIALS IN THE PRODUCTION OF CONSTRUCTION GLASS

Abstract. This article describes the use of local raw materials in glass production and their composition, features of construction glass, construction glass types, assortment, use, requirements for their quality, and production technologies.

Keywords: building glass, hardness, transparency, brittleness, limestone, quartz sand, soda.

Shisha deb kimyoviy tarkibi va qotish temperaturasiga bog'liqsiz ravishda yuqori temperaturada hosil qilgan va eritmani o'ta sovutish orqali olinadigan va yopishqoqlikning asta-sekin oshishi natijasida qattiq jismlarni xossalarini qabul qiladigan barcha amorf jismlarga aytiladi; bunda suyuq holatning shisha tabiatiga o'tish jarayoni orqaga qaytadigan bo'lishi shart. Boshqacha qilib aytganda, kvarts yoki qumtuproq ohaktosh yoki dolomit, natriy karbonat yoki natriy sulfat va boshqa komponentlarni qizdirish yo'li bilan suyuqlantirib, so'ngra maxsus rejimda qoliplash va sovutish yo'li bilan hosil qiladigan qovushqoqligi o'ta yuqori bo'lgan shaffof izotrop qattiq jismlar qurilish shishasi deb ataladi.

Qurilish shishasining asosiy xususiyatlari quyidagicha: hajmiy og'irligi 2450-2550 kg/m³, qattiqligi 5-7, issiqlik o'tkazuvchiligi 0,6-1,15 kkal/m, qalinligi 2-6 mm, siqilish va egilishga chidamliligi 10000 kg/sm².

Qurilish shishasi turi ko'p bo'lgan sun'iy materiallardan biri. U quyidagi to'rt gruppadan tashkil topgan:

1. List shishasi-deraza oynasi, foto shishasi, rangli va rangsiz naqshli shisha, metalli setka bilan amirovkalangan shisha, silliqlangan shisha;

2. Qurilish-arxetiktura shishasi-issiqlik nurini yutuvchi qurilish shishadan yasalgan konstruktiv qurilish shishasi, rangli kuzgu va arxetiktura badiiy shishasi;

3. Ko'pchitilgan shisha-tovush yutuvchi izolyasion material, filtrlovchi g'ovak shisha issiqlik izolyatsiyasini ta'minlovchi shisha;

4. Shisha trubalar-devor qalinligi 1-3 mm va diametri 0,1-40 mm bo'lgan yupqa tanali trubalar, devor qalinligi 2-4 mm va diametri 12-40 mm bo'lgan qalin tanali trubalar.

Shisha ishlab chiqarish jarayoni xomashyo (tabiiy va sun'iy) komponentlardan tayyorlash, aralashtirish, pishirish, shisha massasini sovutish, shakl berish, qizdirish va ishlov berishdan iborat. Asosiy xomashyo sifatida kvars qumlari, soda, potash, ohaktosh, kaolin, dala shpatlari, turli oksidlar, yordamchi matireallar o'rnida buyagichlar (kobolt, nikel, temir, xrom, mis oksidlari) va qaytaruvchilar (ko'mir, koks, qalay) ishlatiladi.

Kvars va ohaktosh singari qattiq xomashyolar jag'li maydalagichlarda bulakchalarga ajratilib, temir oksidi kabi rang beruvchi birikmalardan tozalanadi. So'ngra ular aylanma pech yoki kamerali qurutgichlarda qurutiladi, konusli bolg'achali tegirmonda un holatiga keltiriladi. Elangan qumtuproq, ohaktosh va soda tortilib maxsus mashinalarda aralashtiriladi.

Manzarali, rangli shisha ishlab chiqarishda esa buyoq sifatida mis, xrom, temir, kobalt va boshqa materiallarning oksidlaridan foydalaniladi. Shisha zavodagi maxsus pechlarda 1500 °C temperaturada pishiriladi. Pishirish jarayonini protokli vanna pechlarda amalga oshiriladi. Hozirgi vaqtlarda deraza oynalari vertikal yo'nalishda cho'ziladigan mashinalarda tayyorlanadi. Bu mashinalarda uzluksiz shisha lentasi qoliplovchi moslamaning tirqishi orqali cho'ziladi. Shishaning bunday usulda olingan shisha sifatliroq, shaffof, chiziqchasiz bo'ladi. Mashinalarda qoliplangan shisha eritmasi lentasi maxsus rejimda sovutiladi. Bu vaqtda shishaning ichki kuchlanishi sekinlik bilan yuqola boradi. Lenta sovub mashinadan chiqq borishi bilan tegishli o'lchamlarda list qilib qirqiladi. Qirqim qalinligi 2-6 mm atrofida bo'lib, o'lchami 250x250 dan 1600x2200 mm gacha bo'ladi.

Polirovkalangan vitrina shishasi va ko'zgu olishda kuchlanishdan holi qilingan shisha sayqallash va yaltiratish stanoklariga yo'naltiriladi. Dekarativ buyumlarga esa mexaik ishlovdan tashqari, kimyoviy va badiiy ishlov ham beriladi. Natijasda mahsulot yarqirab, jilva berib turadigan bo'ladi.

Shisha qurilish materialidir. Uning yangi, arzon, go'zal, uzoq chidaydigan shaffof, yarimtiniq, deraza va eshiklarni qoplash, balkonni o'rash, to'siq va devor o'rnida ishlatiladi.

Listli qurilish va dekorativ shishalari imorat va turar-joylarning deraza va eshiklarning oynalash, yuqori nur tushish fonarlarini qoplashda ishlatiladi. Yana ular ko'zgu va mebellar yasashda, zinapoyali jihozlashda qo'llaniladi. Ularning amirovkalangan va rangli turlarini tomlarni berkitish, olovga moyil xonalarni qoliplash, dekorativ oynalshda qo'l keladi.

Maxsus xossalari listli shishalardan ultrabinafsha nurlarini o'tkazadigan shishalar tayyorlanadi. Ultrabinafsha nurlarni yutuvchi shishalardan kitob saqlash xonalariarxiv va boshqa hollarda keng foydallaniladi.

Hozirgi kunda respublikamizning ikki yirik korxonasida qurilish shishasi ishlab chiqarilmoqda. birgina Chirchiq shisha zavodning bir yilda ishlab chiqariladigan qurilish shishasi 2.85 million kvadrat metrni tashkel qiladi. 1975 yilda ishga tushirilgan Quvasoy «kvars» zavodi dekorativ va tanirovkalangan listli shishalarni ko'p miqdorda ishlab chiqarmoqda.

Qurilish oynalarining afzalliklari:

Qurilish shishasi har tamonlama mukammal, mustahkam va zamon talablariga javob beradigan bo'lishi kerak. Qurilish oynalar har qanday me'moriy loyihaga yengillik va obodlikni qo'shadi. Bu zamonaviy, ta'sirchan va chiroyli ko'rinadi. Shu sababli bezatishning bu shakli dunyoning barcha tsivilizatsiyalashgan mamlakatlarida talabga ega bo'lib, savdo markazlari va sanoat binolarini shisha bilan qoplash uchun ishlatiladi. Alyuminiy fasad tuzilmalari yuqori yorug'lik uzatish bilan ajralib turadi. Buning yordamida sanoat va savdo binolarning zamonaviy va ishonchli jabhalari shahar me'morchiligining haqiqiy bezakiga aylanadi.

Kamchiliklari:

- ishlab chiqarish va o'rnatish texnologiyasi buzilgan taqdirda egilish va shishish ehtimoli;
- yong'inga nisbatan past qarshilik.

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*Kurbanova D.S.
o'qituvchi
Jizzax politexnika instituti
Boytemirov X.M.
talaba
Jizzax politexnika instituti
Raxmatov S.M.
talaba
Jizzax politexnika institute*

KIMYO FANINI SAMARALI O'QITISHDA DEDAKTIK USULLARDAN FOYDALANISHNING AHAMIYATI

Annotatsiya. Interaktiv metodlar o'quvchi va o'qituvchining birgalikdagi faoliyati bo'lib, o'quvchilarni ijodiy fikrlashga, zarur xulosalarga kelishga, tahlil qilish va olingan bilimlarni amaliyotga qo'llashga o'rgatadi. O'qituvchining zimmasidagi vazifa esa, o'quvchilarga aniq yo'nalish berish, to'g'ri xulosalarni aytishdan iborat. Bu metodlar yana shunisi bilan ahamiyatli, o'qituvchi o'quvchining fikrini hech qachon keskin rad etmaydi, to'xtatmaydi va ular o'rtasida doimiy faollik ta'minlanadi.

Kalit so'zlar: Tarbiyaviy maqsad, didaktik o'yinlar, ishchanlik o'yini, interfaol usullar.

*Kurbanova D.S.
teacher
Jizzakh polytechnic institute
Boytemirov X.M.
student
Jizzakh polytechnic institute
Raxmatov S.M.
student
Jizzakh polytechnic institute*

THE IMPORTANCE OF USING DIDACTIC METHODS IN EFFECTIVE TEACHING OF CHEMISTRY

Abstract. Interactive methods are a joint activity between a student and a teacher, which teaches students to think creatively, come to the necessary conclusions, analyze and apply the acquired knowledge in practice. The teacher's task is to give clear direction to students and make the right conclusions. Interactive methods are also important because the teacher never rejects or interrupts the student's opinion, and constant activity is ensured between them.

Key words: Educational goal, didactic games, activity game, interactive methods.

Ta'lim muassasalarida tayyorlanuvchi mutaxassislar ma'naviy xislatlari va umumkasbiy salohiyatidan tashqari, avvalo muayyan tanlangan sohaning chuqur bilimdoni bo'lishi ham lozimdir. Buni amalga oshirish uchun talabalar tafakkurini faollashtiruvchi va chuqurlashtiruvchi, shuningdek, ilmiy-o'quv axborotining uzatish jarayonini jadallashtiruvchi va samaradorligini oshiruvchi faol ta'lim texnologiyalari ishlab chiqilishi va amaliyotga keng ko'lamda joriy qilinishi lozim bo'lib qoldi.

Har bir darsda, uning maqsadidan kelib chiqqan holda aniq dasturlar qo'llanishi mumkin. O'quv jarayonida samarali foydalaniladigan dasturiy vositalar kasbiy kimyo o'qitishga mos bo'lishi, yuqori darajadagi ko'rgazmalilikka, foydalanishga oson, umumo'quv va tajribaviy ko'nikmalarini shakllantirishiga, bilimlarni umumlashtirish va chuqurlashtirish imkoniyatlariga ega bo'lishi kerak [1]. Tadqiqotlarning natijalari shuni ko'rsatdiki, talabalarni o'z kasbiga bo'lgan qiziqishini oshirishda yangi axborot texnologiyalari, xususan pedagogik dasturiy vositalarning roli katta. Pedagogik dasturiy vositalarni o'quv jarayonida maqsadga muvofiq bo'lgan metodika asosida qo'llash bo'lajak pedagoglarni va boshqa mutaxassislikka oid kurslar bo'yicha amaliy bilimlarini mustahkamlash bilan birgalikda yangi axborot texnologiyalariga bo'lgan qiziqishini oshiradi. Yuqoridagi fikrlar asosida kimyo darslarini har doim an'anaviy tarzda emas, ba'zan noan'anaviy tarzda tashkil etish yaxshi natija beradi. Masalan, dars boshlanishida o'quvchilarga kartochka-topshiriq va shu topshiriqqa oid model (krossvord yoki skanvord, rebuslar tuzish ham mumkin) tarqatib chiqiladi.

Topshiriqni birinchi bo'lib bajargan o'quvchilar baholar orqali rag'batlantirilishi e'lon qilinadi.

Kimyoga oid qiziqarli masalalarga krossvord, rebus va ijobiy izlanishga undaydigan masalalarni kiritish mumkin. Bunda o'quvchilarni zeriktirmaslikka, kimyo atamalaridan so'z boyligini oshirish va tez fikrlashga o'rgatadi. Kimyoga oid rebusni tuzishga turmushda uchraydigan va o'quvchilarga ma'lum bo'lgan ob'ektlar, shakllar yoki tasvirlarni tanlash maqsadga muvofiq.

O'quvchilarni fanga qiziqtirish, darsda qiziqarli masalalar va didaktik o'yinlardan unumli foydalanib faol o'quv-biluv jarayonini vujudga keltirish orqali o'quvchilarning grafik tayyorgarligi darajasini oshirish va kasbiy shakllantirish mumkin.

Kimyodan yaratilgan o'yin dasturlari o'quvchilarda o'quv motivatsiyasini shakllantirishga, ijodiy fikrlashga, mustaqil ishlash va bilim boyligini oshirishga xizmat qiladi.

Kimyodan kompyuter o'yinlarini ishlab chiqish texnologiyalari quyidagi bosqichda amalga oshiriladi:

- O'quvchilarning o'zlashtirishida murakkab bo'lgan mavzu tanlab olinadi.

- O'yinning maqsadi va sharti aniqlab olinadi.

Ta'limiy maqsad – o'yin davomida o'quvchi mavzunining mohiyatini to'liq tushunib oladi.

Tarbiyaviy maqsad - o'quvchilarda kuzatuvchanlik, ziyraklik, ogohlik, topqirlik va estetik did kabi fazilatlarni tarbiyalaydi.

Rivojlantiruvchi maqsad – o'quvchining fazoviy tasavvur qilish, mantiqiy fikrlash va ijodkorlik qobiliyatlarini rivojlantirishga xizmat qiladi.

Ishchanlik o'yini darsi – dars mavzusi bo'yicha masalalarni hal etish jarayonida o'quvchilarning faol ishtirok etishini ta'minlash orqali yangi bilimlarni o'zlashtirish mashqi.

Rolli o'yin darsi - dars mavzusi bo'yicha masalalarni o'rganishda o'quvchilarga oldindan ma'lum rollarni taqsimlash va dars jarayonida shu rolni bajarishlarini tashkil etish asosida bilimlarni mustahkamlash darsi. bu usulni asosan element, kimyoviy belgi mavzusida qo'llash yaxshi samara beradi. 7-sinf o'quvchilari element belgisi haqida, ham element xossasi haqida tushunchaga ega bo'ladi

Teatrlashtirilgan dars – dars mavzusi bilan bog'liq sahna ko'rinishlarini tashkil etish orqali dars mavzusi bo'yicha chuqur, aniq ma'lumotlar berish darsi.

Kompyuter darsi – tegishli o'quv fani bo'yicha dars mavzusiga doir kompyuter materiallari (multimedia, virtual o'quv kursi va shu kabilar) asosida o'tiladigan dars.

Kim oshdi savdosi darsi – o'quv fani ayrim bo'limi bo'yicha bilimlarni har bir o'quvchi qanchalik ko'p bilishini namoyish etish darsi.

Formulalar darsi – o'quvchilarning formulalarni puxta o'zlashtirishlari bo'yicha turli o'yinlar shaklidagi mashqlar o'tkazish darsi.

«Mo'jizalar maydoni» darsi – o'quvchilar bilan o'tkaziladigan qiziqarli o'yin bo'lib, turli savollarga belgilangan vaqt davomida to'g'ri javoblar topish va g'oliblarni rag'batlantirish orqali o'quvchilarda fikrlash, topqirlik, ziyraklik va bilimlarini kengaytirib borish sifatlarini shakllantiradi.

Didaktik o'yinlar tashkilotchilari ular uchun ishlatiladigan har bir material bilan ishlash, ulardan tegishli didaktik vositalarni tayyorlash hamda xavfsizlikni ta'minlash texnologiyalarini puxta bilishlari va rioya qilishlari lozim. Chunki didaktik vositalarning sifati, ko'zda tutilgan maqsadlariga mosligi, qulayligi va ulardan to'g'ri foydalanish mashg'ulotlar samaradorligini oshirishga ijobiy ta'sir ko'rsatadi.

Maktabda har bir o'qituvchi ayrim turdagi didaktik o'yin mashg'uloti o'quv materiallarini amalda qo'llash uchun tayyorlashini tashkil qilish metodi faoliyatning ajralmas qismi hisoblanadi.

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*Kurbanova D.S.
Sarabekova M.Ya.
Mamadullayev M.O.
Soyibov N.R.*

ORGANIK BIRIKMALARDA KIMYOVIY BOG‘LANISHNING ELEKTRON TABIATI

Annotatsiya. Ushbu maqolada, organik birikmalarda uchraydigan kovalent bog‘lanishning xossalari, ularni gibridlanish holatlarini, bog‘lanishda ishtirok etadigan elektronlar haqida bayon etilgan.

Kalit so‘zlar: kovalent bog‘lanish, gibridlanish, elektron orbital, σ va π bog‘lar, zaryad, elektron bulut, fazoviy yo‘nalish, uglerod atomi, organik birikma.

*Kurbanova D.S.
Sarabekova M.Ya.
Mamadullayev M.O.
Soyibov N.R.*

ELECTRONIC NATURE OF CHEMICAL BONDS IN ORGANIC COMPOUNDS

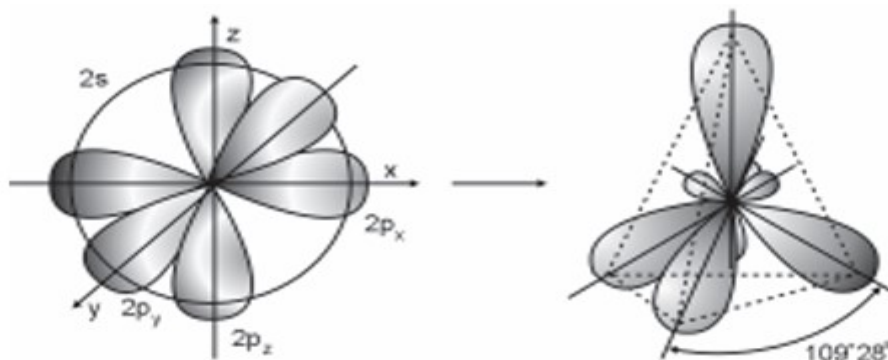
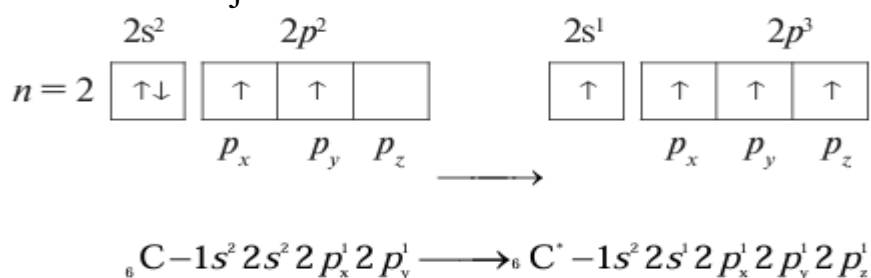
Abstract. This article describes the properties of covalent bonds found in organic compounds, their hybridization states, and the electrons involved in the bond.

Key words: covalent bond, hybridization, electronic orbital, σ and π bonds, charge, electron cloud, spatial direction, carbon atom, organic compound.

Organik birikmalarda eng ko‘p uchraydigan kimyoviy bog‘lanish biroz qutblangan kovalent bog‘lanishdir. Bu bog‘lanish elektron bulutlarning o‘zaro qoplanishi natijasida hosil bo‘ladi. Kovalent bog‘lanishlar bir-biridan o‘z qutblanuvchanligi bilan farq qiladi. Organik birikmalarda atomlar kovalent bog‘lardagi qutbla nuvchanlikka qarab qisman zaryadlangan bo‘ladi. Anorganik birikmalarda bu zaryadlar butun son bilan ifodalanadi va oksidlanish darajasi deyiladi. Organik kimyoda esa qisman zaryadlanish d^+ va d^- harflar bilan ifodalanadi. Elektron zichlikning bir atomdan ikkinchi atomga siljishi organik birikmalarning elektron formulalarida, ko‘pincha umumiy bog‘lovchi elektron juftlarning siljishi bilan $C \delta^+ - H \delta^-$ yoki strelka bilan ko‘rsatiladi: $CH_3 \rightarrow Cl$.

Kovalent bog‘lanishning eng muhim xossalari biri uning yo‘naluvchanligidir. Bog‘lanishning yo‘naluvchanligi molekullarning fazoviy tuzilishiga, ya‘ni ularning geometriyasiga (shakliga) bog‘liq bo‘ladi. O‘zaro

reaksiyaga kirishuvchi atom larning elektron bulutlari bir-birini qoplaganda qanday shakl va fazoviy yo'nalish kelib chiqishiga qarab molekulari chiziqli va burchaklarga ega bo'lgan birikmalar hosil bo'ladi. Ko'p atomlardan hosil bo'lgan kovalent bog'lanishlar doimo fazoviy yo'nalgan bo'ladi. Bog'lanish orasidagi burchak valent bur chaklar deyiladi. Ko'pincha kovalent bog'lanish hosil bo'lishida ishtirok etadigan elektronlar turli holatlarda, masalan, biri s, ikkinchisi p-orbitallarda bo'ladi. Bundan molekuladagi bog'lanishlarning puxtaligi ham turlicha bo'lishi kerak edi. Lekin tajriba ular teng qiymatli ekanligini ko'rsatadi. Bog'lanishlar puxtaligining bir xilligi 1931-yilda Amerikaning kimyogar olimi L. Poling (1901—1994) tomonidan taklif etilgan atom orbitallarning gibridlanishi haqidagi qoida bilan izohlanadi. Gibridlanishda atom orbitallarning dastlabki shakli hamda energiyasi o'zgaradi va bir xil shakl hamda energiyaga ega bo'lgan elektron orbitallar hosil bo'ladi. Gibridlangan orbitalning kimyoviy bog'lanishi gibridlanmagan (sof) orbitalnikiga qaraganda ancha mustahkam bo'ladi, chunki gibridlanishda bulutlar bir-birini ko'proq qoplaydi. Organik birikmalarda uglerod atomi 3 xil sp^3 -, sp^2 - va sp -gibridlanish holatida bo'lishi mumkin. sp^3 -gibridlanish. Metan molekulasining hosil bo'lishida sp^3 -gibridlanish sodir bo'ladi. Bunda uglerod atomi «qo'zg'al gan» holatga o'tadi, ya'ni $2s^2$ dagi elektronlar bir-biridan ajraladi.



Uglerod atomining sp^3 - gibridlanishi

Metan molekulasining hosil bo'lishida uglerod bitta s va uchta p- elektronlarining orbitalari gibridlanadi hamda to'rtta bir xil gibrid orbitallar hosil bo'ladi. Gibrid orbitallarning o'qlari orasidagi valent burchak $109^\circ 28'$ ga teng. Uglerod atomining to'rtta gibrid sp^3 - orbitallari bilan to'rtta vodorod atomining s- orbitallari bir-birini qoplashi natijasida to'rtta bir xil bog'lanishli mustahkam metan molekulasini hosil bo'ladi. Birikayotgan atomlarning markazlarini

biriktiruvchi to'g'ri chi ziq bo'ylab orbitallarning bir-birini qoplashi natijasida yuzaga ke ladigan bog'lanish σ (sigma) bog'lanish deyiladi. Ma'lumki, metan molekulasida 4 ta σ - bog' bor. Birikayotgan atomlar o'zaro bitta dan ortiq σ - bog' hosil qila olmaydi. Shu sababli C — C orasida oddiy bog' σ bog'lanish bo'ladi. sp^2 - gibrirlanish. Etilen molekulasida qo'shbog'idagi uglerod atomida bitta s va ikkita p-orbitallar gibrirlanib, uchta tenglashgan orbitallar hosil qiladi. Ular bitta tekislikda 120° burchakda joylashadi. Bunday gibrirlanish sp^2 - gibrirlanish (yoki trigonal gibrirlanish) deyiladi. Har qaysi uglerod atomida bittadan p-orbitallar gibrirlanmagan bo'lib, u gibrirlangan orbitallar tekisligiga perpendikular joylashgan bo'ladi. Metanning tetraedr molekulasida σ - bog' larning hosil bo'lishi. Etilen molekulasida ikkita uglerod atomi sp^2 - gibrirlangan holatda bo'lib, σ - bog'lanish hosil qiladi. Har qaysi uglerod atomidagi boshqa ikkita gibrirlanmagan orbitallar vodorod atomlari bilan to'rtta σ - bog'lanish hosil qiladi. Foydalanilmay qolgan ikkita orbital C va H atomlari joylashgan tekislikning ustidan hamda ostidan ikki marta (gantelsimon) bir-birini qoplaydi. Natijada π - bog'lanish vujudga keladi. π - bog'lanishning hosil bo'lish sxemasiko'rsatilgan. Shunday qilib, etilen molekulasida C — C bog'ning bittasi σ -, ikkinchisi π - bog'lar, etilenda jami 5 ta σ - va bitta π - bog'la nish bor. Uglerod atomlari orasidagi qo'shbog' oddiy bog'ga nisbatan qisqa: etan molekulasida uglerod atomlarining yadrolari orasidagi masofa 0,154 nm ga, etilen molekulasida 0,134 nm ga teng. π - bog'lanish oddiy bog'lanishga nisbatan bo'shroq bo'ladi. Shu sababli π - bog'lanish kimyoviy reaksiyalarda oson uziladi va etilen hosilalari paydo bo'ladi. Uglerod atomlarining sp^2 - gibrirlanishi esa sp -gibrirlanish deyiladi.

Agar gibrirlanish bitta s- va bitta p- orbitallar hisobiga sodir bo'lsa, bunday gibrirlanish sp - gibrirlanish deyiladi. Bunda hosil bo'lgan 2 ta gibrirl orbital bir-biri bilan 180° burchak ostida joylashadi. Qolgan ikkita p-orbital sofligicha (gibrirlanmay) qoladi. Bunday sp - gibrirlanishga uchlamchi bog'lanish (asetilen molekulasida)ning hosil bo'lishi misol bo'la oladi. Asetilen molekulasidagi uglerodning sp - gibrirlanish holatida turgan ikkita atomi σ - bog'lanishlar hosil qiladi. Har qaysi atomdan bittadan gibrirlangan orbital vodorod atomlari bilan ikkitadan σ - bog'lanishlar hosil qilishga sarflanadi. Bularning hammasi H - C=C- H molekulasiga chiziqli shakl beradi va to'rtta atom bir chiziqda yotadi. Bundan tashqari har qaysi uglerod atomining ikkita p- orbitali bir-birini qoplashi natijasida ikkita σ - bog' hosil bo'ladi. Bu bog'lar o'zaro perpendikular ikki tekislikda joylashgan (5- b, rasm). Demak, asetilen molekulasida uchta σ - bog'lanish va ikkita π bog'lanish mavjud. Uchlamchi bog'lanish qo'shbog'ga nisbatan qisqa (0,120 nm). Kimyoviy reaksiyalarda π - bog'lar oson uzilib, uchlamchi bog' qo'shbog'ga, qo'shbog' esa birlamchiga aylanadi. Uchlamchi bog' birikmalarining reaksiyaga kirishish xususiyati qo'shbog'li birikmalarga qaraganda kuchliroq bo'ladi.

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*Kurbonov A.S.
Namangan muhandislik-qurilish instituti*

HAYOT FAOLIYATI XAVFSIZLIGI YO‘NALISHIDA TALABALARNI ZAMONAVIY O‘QITISHNING O‘ZIGA XOS JIHLTLARI

Annotatsiya. Ushbu maqolada Hayot faoliyati xavfsizligi fanini o‘qitish samaradorligini oshirish hamda mashg‘ulot xonalariga qo‘yilgan talablar haqida ma‘lumotlar keltitib o‘tilgan.

Kalit so‘z: Hayot faoliyati xavfsizligi, xavf, mashg‘ulot xonasi, xavfsizlik, mehnat muhofazasi, xavfsizlik usullari, nazorat-o‘lchov asboblari.

*Kurbanov A.S.
Namangan Institute of Engineering and Construction*

SPECIFIC ASPECTS OF MODERN EDUCATION OF STUDENTS IN THE DIRECTION OF LIFE ACTIVITY SAFETY

Abstract. This article provides information on improving the effectiveness of teaching Life Safety and the requirements for training rooms.

Key words: Safety of life activity, risk, training room, safety, labor protection, safety methods, control and measuring devices.

Hayot faoliyati xavfsizligi fanini o‘qitishdan maqsad talabalarda kasbiy majburiyatlarini bajarish bilan birga bitiruvchi bakalavr va magistr (kelajakda turli sohalarida rahbar yoki mutaxassis vazifalari)ga ish joylaridagi ishchilarni shikastlanmasdan mehnat qilishi va ularni xavfsizligini yetarli darajada ta‘minlash bilim va ko‘nikmalarni shakllantirishdan iborat. O‘quv fanining vazifasi ishchining shikastlanishi yoki uni kasallikka olib kelishi mumkin bo‘lgan omillarni minimallashtirgan holda ishchiga qulay mehnat sharoitini yaratish orqali mehnatning maksimal samarasiga erishishdir. Oliygo‘hlarning «Hayot faoliyati xavfsizligi» kafedrasida bo‘yicha dars berish va ilmiy-tadqiqot ishlarini o‘tkazish sifatini yaxshilash uchun zamonaviy maxsus jihozlangan xona, auditoriya va o‘quv sinflari talab etiladi. Shu munosabat bilan quyidagilar zarur:

1. Mehnat muhofazasi bo‘yicha zamonaviy multimediyaviy vositalari, nazorat-o‘lchov asboblari, maketlar, manekenlar, sohalar yo‘nalishi bo‘yicha ishchilarning maxsus kiyim namunalari, yong‘in xavfsizligi texnikasi va kiyimkechagi, elektron plakatlar, videomateriallar bilan jihozlangan «Mehnat muhofazasi» xonasini yaratish.

2. Turli sohalar bo‘yicha xavfli obyektlar uchun zamonaviy multimediyaviy vositalari, xavfli obyektlarni xavfsizlik parametrlarini o‘lchash uchun nazorat-o‘lchov asboblari, maketlar, elektron plakatlar, videomateriallar bilan jihozlangan «Sanoat xavfsizligi» maxsus auditoriyasini yaratish.

3. Zamonaviy asbob-uskunalar bilan jihozlangan «Hayot faoliyati xavfsizligi laboratoriyasini» yaratish. Unda zamonaviy multimediya vositalari, radiatsiya va kimyoviy zararlantirishni o'ldirish uchun nazorat-o'lchov asboblari, zamonaviy shaxsiy himoya vositalari (gazniqoblar, respiratorlar, avariyaqutqaruv otryadlarining maxsus qutqaruv kiyimlari va h.k.), maketlar, elektron plakatlar, videomateriallar bo'lishi kerak.

«Mehnat muhofazasi» xonasi mehnatni muhofaza qilish bo'yicha quyidagi chora-tadbirlarning bajarilishini ta'minlaydi:

- mehnat muhofazasi bo'yicha seminarlar, ma'ruzalar, suhbatlar va konsultatsiyalar o'tkazish;

- mehnat muhofazasi bo'yicha, Shuningdek, xavfsizlik usullari, jamoaviy va shaxsiy himoya vositalarini qo'llash, birinchi tibbiy yordam ko'rsatish masalalarini o'rgatish;

- mehnat muhofazasi bo'yicha yo'riqnomalar, mehnat muhofazasi va sanitar me'yorlar bo'yicha alohida bilim talab etiladigan ishchilar bilan tematik mashg'ulotlar o'tkazish va ularni bilimlarini tekshirish;

- xodimlar uchun mehnatni muhofaza qilish talablarini ishlab chiqish; - sog'lom va xavfsiz ish joylarini yaratish bo'yicha ko'rgazmalar, ekspozitsiyalar, stendlar, maketlar va boshqa turdagi ko'rgazmalarni tashkil qilish;

- korxonada (ish joylarida) mehnat sharoitlarini analitik tadqiqot qilish va ularni xavfsiz mehnat faoliyatiga ta'sirini baholash.

Yuqoridagilardan kelib chiqib, mehnat muhofazasi xonasi quyidagilar bilan jihozlanishi kerak: mehnat muhofazasi bo'yicha me'yoriy-texnik hujjatlar, o'quv dasturlari, uslubiy, direktiv va ishchilarga huquqiy masalalar, xavfsizlik texnikasi, ishlab chiqarish sanitariyasi, yong'in xavfsizligi masalalariga o'qitish, yo'riqnoma berish va maslahatlarga ega bo'lgan boshqa materiallar bilan; o'qishning texnik vositalari (audio, videoapparatura, kompyuter texnikasi, trenajyorlar, nazorat-o'lchov asboblari, shovqin o'lchagichlar, gazoanalizatorlar, manometrlar, lyuksmetrlar va h.k.); ko'rgazmali qurollar (plakatlar, sxemalar, maketlar, manekenlar, videofilmlar va xavfsizlik bo'yicha boshqa targ'ibot vositalari).



«Sanoat xavfsizligi» bo'yicha maxsus auditoriyani yaratishda masalan temir yo'l transportida xavfli ishlab chiqarish (texnologiya) obyektlari va asboblari, xavfli yuklarni tashish, yuklash-tushirish, to'kish va saqlash bilan bog'liq ichki temir yo'llari joylashgan temir yo'l stantsiyalari va boshqa korxonalaridagi texnologik jarayonlar keltirilgan videomateriallar bo'lishi kerak. Bevosita temir yo'l transporti sohasida esa ichki temir yo'l relslari, shpallari, tormoz bashmaklari, shlanglar, portlashdan himoyalangan yoritish asboblari, o'ta xavfli yuklarni tashish uchun mo'ljallangan sisternalar va konteynerlar, xavfli yuklarni yetkazuvchi nasoslar, xavfli yuklarni omborlarda saqlash uchun rezervuarlar, temir yo'l da xavfli yuklarni tashish uchun vositalar (lokomotivlar,

teplovozlar)ning maketlari. Shuningdek, suvning harorati 115 °C dan yuqori bo‘lgan bug‘ qozonlari, bug‘ isitish qozonlari, energetik qozonlar, sodoregenerativ qozonlar, yuqori haroratda organik moddalar bilan ishlovchi qozonlar, vakum qozonlar, modul (blokli) qozonlar, Shuningdek, bosimi 0,07 mRa (0,7 kg/sm²) va harorati 115 °C dan yuqori bo‘lgan bosim ostida ishlaydigan idishlar, qopqog‘i tez ochiladigan idishlar, ko‘p joyli barokameralar, ballonlar (avtoullov vositalari va qishloq xo‘jaligi texnikasida foydalanilmaydigan), sisternalar, bug‘ va issiqlik quvurlari, minorali kranlar, portal kranlar, ko‘prikli kranlar, strelali kranlar (avtomobil, temir yo‘l, zanjirli, pnevmog‘ildirakli, kran manipulyatorlar, quvur yotqizuvchi), kabelli kranlar, va boshqa qo‘zg‘almas asosdagi kranlar, elektrotallar, eskalatorlar, funikulyorlar, osmali po‘lat plakatlari bo‘lishi maqsadga muvofiq hisoblanadi.

«Hayot faoliyati xavfsizligi laboratoriyasini» yaratishda esa termoanemometr, lyuksmetr, shovqin o‘lchagich, vibrometr, psixrometr shovqin o‘lchagich (Shumomer), chang o‘lchagich, yurak va o‘pkani reanimatsiya qiluvchi trenajyori hamda elektr tarmog‘ini yerga va nolga ulash stend-trenajyorini bo‘lishi talab etiladi. Xulosa o‘rnida aytadigan bo‘lsak, turli oliygohlarda ta‘lim olayotgan talabalarni kelgusida yetuk mutaxassis kadr bo‘lib yetishishlari uchun nafaqat zamonaviy moddiy-texnik bazalarning mavjudligi, balki mavjud texnologiyalardan mohirona foydalana oladigan, zamonaviy o‘qitishning yuksak taktika va texnikasini egallagan malakali pedagog kadrlar ham muhim ahamiyat kasb etadi.

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*Mamadjonova N.A., doctor of philosophy (PhD)
associate professor
«Agriculture and melioration» department
Andijan Institute of Agriculture and Agrotechnologies*

EFFECTIVENESS OF INTENSIVE AGROTECHNOLOGIES

Abstract. In agriculture, special attention should be paid to reducing the cost of the product using innovative technologies that minimize the cost of fertilizers, fuels, and lubricants, mechanization services for the placement of fertile varieties in conditions of appropriate soil and climate based on the integration of science, education and practice.

Key words: soil, bentonite, water, fertilizer, crop variety, cotton, rotation.

Introduction. The aim of work is to develop a technology for the use of non-conventional agro-ore material (bentonite clay) to save irrigation water and mineral fertilizers depending on an irrigation scheduling in the cultivation of early, highly-productive and high-quality yields of upland cotton varieties in conditions of the light sierozem soils of the Andijan province.

The object of study is light sierozem soils, upland cotton varieties «Andijan-37» and «Sultan», bentonite clay.

Scientific novelty of research is the following:

for the first time in conditions of the light sierozem soils of the Andijan province, a resource-saving agrotechnology for the use of unconventional agro-ore as an addition to mineral fertilizers before soil plowing at a rate of 6000 kg ha⁻¹ and during the budding phase of cotton varieties at a rate of 750 kg ha⁻¹ has been developed;

Literature review. Comprehensive soil improvement, increasing yields and economic efficiency is one of the important issues for the future development of agriculture.

- optimal water consumption has been identified, up to 25% reduction of the use of mineral fertilizers in the cultivation of cotton varieties achieved due to the use of non-traditional agro-ore (bentonite), which resulted in increase of soil water-holding capacity;

- the impact of the effective use of non-traditional agro-ore as resource-saving agrotechnologies in the cultivation of cotton varieties «Andijan-37» and «Sultan» on their irrigation scheduling, fertilization and on growth, development and yield has been determined;

- the effect of using non-traditional agro-ore as supplements to mineral fertilizers once every three years before soil fertility, agro-physical, agro-chemical properties as well as on the 10-15% increase of economic efficiency of resource-saving technology has been determined.

It is very important to make right choice of cotton varieties reliable to the local climate, fast ripen, highly productive, stable to diseases and vermins; to locate them reliable to the zones, to seed cotton in double rows, to till the soil and get ready for seeding, thin cutting, applying growth controlling minerals; cutting cotton plant top, fertilizing, eliminating qualified effective agritechnical processes on time.

Growth confirming minerals effect elevating of plants sprouting capacity, their stability to drought and activity, diseases and vermins of agricultural crops, their ripening speed elevating.

It is very important to make right choice of cotton varieties reliable to the local climate, fast ripen highly productive, stable to diseases and vermins, to locate them reliable to the zones, to seed cotton in double rows, to till the soil and get ready for seeding, seeding, thin cutting, applying growth controlling minerals. Cutting cotton plant top, fertilizing, eliminating qualified effective agritechnical processes on time.

There exist lots of factors to increase crop productivity but the most decisive part have meliorative state of soil, fertilizer, crop variety and crop rotation. Without fertilizing cotton productivity can not run over 12-14 centner per hectare, when fertilized with mineral it can reach 20-30 centners and with organic fertilizers 30-33, with crop rotation it reaches 35-40 centners /hec. (J.Akhmedov, K. Mirzajonov, 2007). Having studied the scientific conclusions of a number of scientists we experimented Sultan and Andijan-37 cotton varieties in Asaka, Izboskan districts of Andijan region and in Andijan Agriculture Institute experimental campus in 2011-2014. We studied growth, vegetation and agritechnical processes and those varieties.

Research methodology. Studying were carried out in the field conditions of Uz.S.V.I. (Uzbekistan scientific verification) based on «Methods of carrying out field experiments» (2007). Field experiments were located out at 12 variants, general area of 200 m² 100 m², in total; 8 rows and 3 repetitions [2].

In the experiment Andijan-37 and Sultan cotton varieties were sowed at scheme 90x15-1-2. The variants were cultivated in LFCD (Limited field contained dampness) soilumidity during growing period 60-70-60 % and 70-70-60% in two different watering regimes, two seedlings density 100-110 and 120-130 thousand per/hec., two kinds of fertilizers NPK 150-105-75 and NPK 200-140-100 kg/hec.

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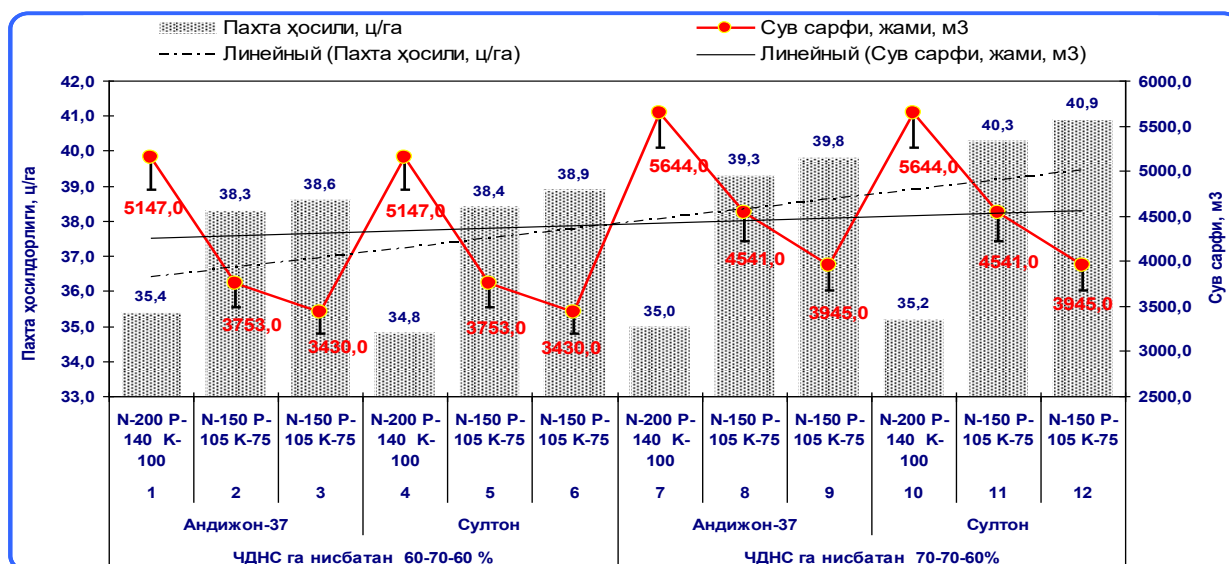


Before watering made the most reliable condition for growth and vegetation of plants and for the plants of other soil condition concerning to 70-70-60 percent watering regime variants and agricultural mineral powder used variants soil humidity [3].

Primary conclusions:

- limited field humidity capacity of the field experimental soil (LFCD) in 0-100 cm layer made 24 % and mass weight made 1,35 gr cm³ a little superiority of Sultan variety vegetation at the beginning of progressing period over Andijan-37 and capsule with bentonite was noticed;

- Cotton plant varieties were fertilized with NPK 150-105-75 kg/hect. mineral at 750 kg mixed with bentonite, in two different in comparison to variants LFCD 60-70-60% and 70-70-60% in both soil humidity variants watered with bentonite it effected fruitfully and maintained saving humidity in cotton plant rows, cavity of soil, water conductivity features during vegetation period in comparison to usual soil humidity variants



- In the experiment in the soil condition fertilized with NPK 150-105-75 kg/hect. adding 750 kg bentonite concerning to both variants LFCD in both watering regimes diminishing soil capacity and improving its cavity considerably in creasedits water absorbing capacity[4]. Soil layers watered in 60-70-60% soil humidity in comparison with LFDC showed the highest capacity of water absorbtion. Water absorbtion of soil in fertilized soil was 74,6 m³ in comparison to the starting point of vegetation period it was 80,5 m³/hect;

- in cotton plant cultivation use of NPK 150;105;75 kg/hect with minimal doses of bentonite made reliable condition for growth and vegetation of cotton plants. Efficacy of fertilizers in reased the process to 25%.

Analysis and Results. In Andijan region light grey soil conditions fertilizing cotton plants in vegetation period at NPK 150-105-75 kg/hect with minimal doze of bentonite 750 kg/hect was observed to be the most agricultural process. It gave the oportumty to diminish technology resource use, water, fertilizer, fuel, cotton plant seeds application [5].

Based on the research results on the development of optimal norms for the use of unconventional agro-ore as a supplement to application of mineral fertilizers in order to increase cotton yields in conditions of light sierozem soils:

A «Recommendation on the use of agro-mineral bentonite to provide cotton with additional water and fertilizer» for farmers have been developed and approved (Reference of the Ministry of Agriculture, №02/020-227 from August 27, 2018). This recommendation is widely used as a guideline in the agricultural departments and farms of the Andijan province;

Agrotechnology allowing to ensure saving of mineral fertilizers during production cultivation of cotton varieties «Andijan-37» and «Sultan» has been introduced on an area of 61.6 ha in light sierozem soils of the Altynkul district (Reference of the Ministry of Agriculture, №02/020-227 from August 27, 2018). Mixing of 750 kg ha⁻¹ agro-mineral bentonite clay with mineral fertilizers (N₁₅₀P₁₀₅K₇₅ kg ha⁻¹) during cotton budding phase allows reducing application of

mineral fertilizers by 25%.

This resource-saving agrotechnology was implemented in the 45 ha of the Markhamat district and 50 ha of the Izboskan district, the Andijan province (Reference of the Ministry of Agriculture, №02/020-227 from August 27, 2018).

The use of agro-mineral bentonite clay at a rate of 6 t ha⁻¹ (once in three years) before soil plowing in autumn with irrigation regime by a scheme of 1-2-1 (at 70-70-60% Fc) leads to savings of 870 to 920 m³ ha⁻¹ of water, obtaining an additional yield of 3.8 - 4.0 t ha⁻¹ of cotton yield, which is by 0.4-0.45 higher compared to the yields obtained with traditional agricultural technologies.

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*Mamajanov R.I.
Samarkand State University
Kudratov Sh.
Samarkand State University
Sulaymanov U.A.
Samarkand State University*

TRANSFERRING UNIVERSITY TEXTBOOKS TO THE BRAILLE ALPHABET

Abstract. The topic of transferring university textbooks to Braille alphabet is the main means of writing and reading for many people, so the topic of transferring university textbooks to Braille alphabet includes many instructions. In the article, Topics such as how to create Braille, methods of converting textbooks and teaching materials to Braille, the average use of Braille in university curricula and the parts used can be seen.

Keywords: University textbooks, braille, testing and corrections, creation of point sets, 3D printers.

Introduction. Braille is a raised-dot font for writing and reading by the blind, which is based on a combination of hexagonal dots. The sign, depicted by a combination of raised dots 0.6 mm high and 1.4 mm in diameter, is recorded in a cell measuring 4.2 mm x 7 mm. With a certain skill, text written in this way can be easily recognized by touch. The ease of reading signs and their compactness allow a blind reader to read the text quickly enough. Such a system of writing and reading was created by the French teacher Louis Braille (1809-1852). The alphabet, numbers, musical notes and any other printed symbols can be reproduced in the Braille system by various combinations of dots in a cell (cell). Braille notation is also used to write math symbols, equations, computer symbols, and to write foreign languages.

When blind or visually impaired children learn to read, Braille is the best way to develop spelling, grammar, and punctuation skills. In addition, complex diagrams and graphics that are difficult to describe verbally can be easily described through the Braille system.

Learning the Braille system will enable a blind child to move on to working on a computer with a Braille display and a Braille printer. Braille is read by touch, using the index finger of one or both hands [1].

The purpose for which we offer you this manual for learning the Braille system at home is to teach you how to communicate with your blind friends and blind members of your family. You can write a letter, leave a note or a phone number. And what is also very important - you will be able to read a letter, note or phone number left for you, you will be able to freely communicate with friends and relatives without intermediaries. This manual can be successfully used by

school teachers and rehabilitation specialists. It takes some effort to learn Braille and write accurately and accurately. For example, an incorrect dot can change the phone number. But knowing the Braille system is worth the effort. Set yourself the goal of achieving the highest possible results - and try to achieve success.

Main part.

To create university textbooks in Braille, the following steps are required:

Choose by Alphabet: The Braille alphabet is based on a set of 6 dots that represent both letters and numbers. For each letter of the alphabet there are sets of designated points. Communicate with a university Braille teacher or staff member. They can advise you on learning Braille and getting Braille textbooks. Get it in Braille from the university's website or other sources that provide textbook information. This is useful for downloading and reading textbooks. Find institutions and online resources that have resources and textbooks for learning Braille. This will help you learn to read Braille texts. Communicate with Braille teachers, university staff, or anyone else you want to learn from. They can help you learn and use Braille. Taking time to read Braille textbooks and learn Braille and it will be helpful if you make a study plan for the early Stages. This will help you to be effective in the learning process [7].

Data structure: Structure information about the location of each letter and the set of fixed points. For example, the letter «a» can be placed in the upper-right set, and «b» in the upper-middle set. Information can be gathered by contacting university support centers or teachers. Several public and private organizations support the study of Braille and provide Braille texts. You can contact them to use their instructions. There are art guides for learning Braille and getting Braille texts. For example, organizations such as The Braille Authority of North America provide information on how to obtain Braille texts. There are several online resources for learning Braille and obtaining Braille texts. These resources will help you get Braille texts and use them to learn Braille. Some communities or institutions assist in learning Braille and obtaining Braille texts. Seeking their support and contacting them can help you. The following methods can be used to transfer textbooks and educational materials to Latino Braille:

Exercise symbols and devices: Using exercise symbols and devices for programming is good advice for many aspects of reading and writing. These symbols and devices help to create Braille symbols and sets of dots. The practice symbols and devices method can be advantageous for converting textbooks and educational materials to Latino Braille.

Easy to learn: Learning Latino Braille practice signs is easy and fast. This makes it easier for students to understand textbooks and manuals.

Smoothness and confidence: In the fun characters and devices method, the letters and words are represented in each character, so the textbooks can be read in a concise and accurate way. This makes it easier for students to understand the text and makes them feel comfortable. Ease of use for experienced teachers:

Latino Braille practice signs and devices for teachers are reliable and easy to use. They can support students in their understanding and application of textbooks [3].

Adaptation to a variety of teaching materials: Latino Braille's practice signs and devices method allows for the transfer of textbooks and teaching materials in a variety of types and formats. It is widely used to translate texts, textbooks, articles, stories and other educational materials into Latino Braille.

Designed for Multilingual Materials: This method is designed for converting textbooks and educational materials in different languages to Latino Braille. This allows students to work with multilingual texts and enables them to read and learn multilingually.

The advantages of the interactive signs and devices method make it good and effective for translating textbooks and educational materials into Latino Braille. This allows students to feel comfortable and understand the textbooks, and also ensures that teachers can learn and understand different types of textbooks and materials.

Computer programs: Computer programs are good tools for automating textual data. These programs make it easy to convert text to Braille for reading and writing.

The role of computer software and technology in translating textbooks and educational materials into Latino Braille is very important. It is important to understand their position for the following reasons:

Speed and efficiency of training: Computer programs and technologies help to automate and speed up the method of training symbols and devices. These programs allow you to automatically convert textbooks and educational materials to Latino Braille, and also allow you to prepare a large number of texts in a short time.

Accurate and Accurate Copying: Computer software helps in accurate and accurate copying of textbooks and study materials. They allow detection and automatic correction of incorrect or fine-marked areas, as well as reducing errors and helping to make copies quickly and efficiently.

Use for Multilingual Textbooks: Computer software also helps in converting multilingual textbooks and educational materials into Latino Braille. They provide the ability to work with texts in different languages and also help in the automatic preparation of multilingual textbooks.

Authoritative Algorithms and Comprehensive Programs: Authoritative computer programs provide the necessary algorithms and comprehensive programs to implement the method of exercise symbols and devices. They help in the automatic acquisition and preparation of textbooks and study materials.

Software interface for corrections and correction process: Computer programs provide easy access and correction of exercise symbols and device method for learners, teachers and technicians. They provide future control of destinations with customizable interfaces.

Also, computer programs and technologies are useful for experienced teachers and technicians, and are of great importance in strengthening and disseminating the method of training signs and devices [5].

3D Printers: 3D printers are one of the innovative ways to transfer Braille. They are ideal devices for creating Braille dot sets.

3D printers are important for translating textbooks and educational materials into Latino Braille for the following reasons:

Products for individual use: 3D-printers allow each user to make products according to personal requirements and needs. This enables the development of customized textbooks and learning materials for each student, as well as providing them with tailored advice and support.

Structure and design possibilities: It is very easy to design and edit textbooks and educational materials with 3D printers. This allows learning materials to be tailored to the most suitable requirements and also allows them to be tailored for individual learners according to personal requirements.

Development in a short time: With 3D printers, the development of textbooks and educational materials can be done in a short time. This allows for quick reaction to requests for new textbooks or materials, as well as speed and efficient management of new materials.

Multiple functions and methods: 3D printers work with a variety of materials and learning tools. They can work on a variety of materials, such as plastics, metals, and synthetic materials. This provides an opportunity to use different methods and many materials in studying textbooks and teaching materials.

Innovative methods and technologies: 3D printers are used to learn innovative methods and technologies and create educational materials. It is new and interest-based for students, helping them think critically and solve problems.

Thus, 3D printers help to provide an innovative, efficient and individualized service for translating textbooks and educational materials into Latino Braille. They provide convenience and speed in the development and distribution of educational materials, and also enhance the environment for students to be new and interesting.

Conclusions. I present the guidelines and suggestions related to the transfer of textbooks and educational materials to the Braille alphabet with the following conclusions and recommendations:

Guidelines and manuals: Universities should demonstrate the creation of guidelines and manuals for converting textbooks and teaching materials into Braille. It provides instructions and guides on how students can learn and use Braille.

Easy to read: The use of computer software is of great importance in translating textbooks and educational materials into Braille. These programs help Braille learners to create and read texts and textbooks efficiently and comfortably.

Textbook Reinterpretation Information: When translating textbooks and educational materials into Braille, reinterpretation information is essential to improve student comprehension. Each paragraph should contain brief comments about the main content, theme and problems of the text.

Online Resources and Electronic Programs: Universities strive to provide Braille-translated textbooks and teaching materials through online electronic programs. It allows students to read for the Early Stages and also allows them to use interactive and multimedia to learn Braille.

User Education and Support: Universities strive to provide services to support students in learning and using Braille. This can be done by providing Braille teachers, techniques and Early Stage lessons and teaching materials.

Multilingual Materials: It is important to provide Braille textbooks and learning materials in a multilingual format. It supports multilingual readers and enables them to work with texts in different languages.

Thus, universities strive to provide a convenient and efficient service in the transfer of textbooks and teaching materials to Braille, as well as ensure that students feel comfortable and understand what they are reading. This is important for the development of inclusive education and the development of the potential of each student.

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*Mamajonov X.
«Iqtisodiyot» yoʻnalishi 4-kurs talabasi
Abdusattorov A.
«Iqtisodiyot» yoʻnalishi 4-kurs talabasi
Teshaboyeva Z.T.
«Iqtisodiyot» kafedrasi dotsenti
Andijon mashinasozlik instituti*

BANK XIZMATLARI OMMABOPLIGINI OSHIRISHNING IJTIMOIIY- IQTISODIY JIHATLARI

Annotatsiya. Maqolada mamlakatda iqtisodiy faollikni oshirish va investitsion faoliyatni faollashtirishda bank xizmatlaridan foydalanish darajasini oshirish, ularning ommabopligini oshirish zarurligi koʻrib chiqilib, rivojlantirish boʻyicha tavsiyalar keltirilgan

Kalit soʻzlar: Iqtisodiyotni liberallashtirish, bank xizmatlari, bank xizmatlari ommabopligi, raqamli bank xizmatlari, onlayn- banking, moliyaviy savodxonlik.

*Mamajonov Kh.
4th year student
direction «Economics»
Abdusattorov A.
4th year student
direction «Economics»
Teshaboeva Z.T.
associate professor
Department of Economics
Andijan Mashine Building Institute*

SOCIO-ECONOMIC ASPECTS OF INCREASING THE AVAILABILITY OF BANKING SERVICES

Abstract. The article discusses the need to increase the level of use of banking services and increase their accessibility to increase economic and investment activity, and also provides recommendations for their development.

Key words: Economic liberalization, banking services, accessibility of banking services, digital banking services, online banking, financial literacy.

Tijorat banklari iqtisodiy faoliyatining barqarorligini taʼminlashning asoslari davlatning iqtisodiy siyosati bilan uzviy bogʻliq boʻlib, ushbu masala boʻyicha Oʻzbekiston Respublikasi Prezidentining 2020 yil 12 maydagi «2020-

2025 yillarga mo'ljallangan O'zbekiston Respublikasining bank tizimini isloh qilish strategiyasi to'g'risida» PF-5992-son Farmonida bank tizimini isloh qilish strategiyasi belgilandi[3].

Har bir jamiyatda bank tizimi iqtisodiyotning muhim va ajralmas tarkibiy qismi hisoblanadi. Banklar xo'jaliklarga kredit berish, korxonalar, tashkilotlar o'rtasida xisobkitoblarni o'tkazish jarayoni, kapital harakatida vositachi sifatida maydonga chiqadi.

Bank xizmatlari ommabopligi tushunchasining mohiyati aholining to'lovlar, hisob-kitoblar, kreditlar va depozitlar kabi turli xil bank xizmatlarini cheklovlarsiz va to'siqlarsiz olish qobiliyatidir. Bank xizmatlarining ommabopligiga ta'sir qiluvchi omillarga quyidagilar kiradi:

- banklarning filial tarmog'ining rivojlanishi va mintaqaviy kompaniyalarning xizmat ko'rsatish qulayligiga bog'liq bo'lgan jismoniy foydalanish imkoniyati;

- mavjud aloqa kanallarining qulayligi, barqarorligi va elektron xizmat ko'rsatish sifati bilan bog'liq;

- moliyaviy savodxonlikning past darajasi, moliyaviy tashkilotlarga ishonchsizlik va mentalitetning o'ziga xos xususiyatlari ham bank xizmatlaridan foydalanishni cheklashi mumkin.

O'zbekistonda, boshqa ko'plab mamlakatlarda bo'lgani kabi, bank xizmatlaridan foydalanish imkoniyatini oshirish bo'yicha ko'plab chora-tadbirlar ko'rilmog'ida. Ulardan ba'zilari quyidagilarni o'z ichiga oladi:

1. Masofaviy xizmat ko'rsatish kanallarini rivojlantirish: O'zbekistonda Internet-banking, mobil ilovalar va boshqa masofaviy xizmat ko'rsatish kanallari faol rivojlanmog'ida.

2. Filiallar va bankomatlar tarmog'ini kengaytirish: O'zbekiston hukumati bank infratuzilmasini rivojlantirishga faol sarmoya kiritmog'ida, butun mamlakat bo'ylab filiallar va bankomatlar tarmog'ini kengaytirmog'ida.

3. Ixtisoslashtirilgan bank mahsulot va xizmatlarini ishlab chiqish: O'zbekiston banklari turli toifadagi mijozlarning ehtiyojlarini qondira oladigan kreditlar, depozitlar, to'lov kartalari va boshqa xizmatlarni o'z ichiga olgan keng turdagi mahsulot va xizmatlarni taklif etadi.

4. Aholining moliyaviy savodxonligini oshirish: Mamlakatda aholining moliyaviy savodxonligini oshirish bo'yicha turli tadbirlar, jumladan, maktab va universitetlarda o'qish, shuningdek, axborot kampaniyalari o'tkazilmog'ida.

Bank tizimidan foydalanishda aholining faolligi sezilarli darajada oshdi. Agar 2023 yilning birinchi yarmida kredit portfelining 22,5 foizi jismoniy shaxslarga tegishli bo'lsa, unda bir yil ichida ularning ulushi 6 foizga o'sib, 28,6 foizni tashkil etdi va yuridik shaxslar soni mos ravishda 77,5 foizdan 71,4 foizga kamaydi [6].

- O'zbekiston bozorida 2023 yilning 1 yarim yilligi uchun jami pul tushumlari 295,4 trln so'mni tashkil etib, 2022 yilning shu davriga nisbatan 30,7 foizga o'sdi.

- O'zbekiston Respublikasi Markaziy banki ma'lumotlariga ko'ra, pul tushumlarining umumiy summasida terminallar orqali tushumlar ulushi 2022 yilning birinchi yarim yilligidagi 32,6 foizdan 2023 yilning birinchi yarim yilligidagi 38,2 foizga o'sdi. Savdo va xizmatlar sohasidan terminallar orqali tushumlar ulushi 2022 yilga nisbatan 37,5 foizdan 40,4 foizga oshdi [4].

Bank xizmatlarining ommabopligini oshirishga ta'sir ko'rsatuvchi muhim omil- bu qayta moliyalash stavkasidir. Qayta moliyalash stavkasi-bu mamlakat Markaziy banki tijorat banklariga kredit berish stavkasi bo'lib, uning darajasi banklar o'z mijozlariga taqdim etadigan kreditlar bo'yicha foiz stavkalariga ta'sir qiladi.

Ammo, agar asosiy stavka pasaytirilsa, banklar kreditlarni past foiz stavkalari bo'yicha taklif qilishlari mumkin, bu esa qarz oluvchilar uchun yanada qulayroq bo'ladi. Shunday qilib, asosiy stavka aholi uchun bank kreditlari ommabopligini aniqlashda muhim rol o'ynaydi.

Bank xizmatlarining ommabopligini oshirishning quyidagi yo'nalishlarini taklif etish mumkin:

Bank filiallari va bankomatlar tarmog'ini kengaytirish:

- qishloq va chekka hududlarda yangi filiallar va bankomatlar ochish;
- naqd pulni komissiyasiz qabul qiladigan va chiqaradigan bankomatlar sonini ko'paytirish.

Mobil va Internet-bankingni rivojlantirish:

- bank hisoblarini boshqarish uchun qulay va xavfsiz mobil ilovalar va veb-platformalarni yaratish;

- mobil qurilmalar va kompyuterlar orqali turli xil bank operatsiyalarini (to'lovlar, o'tkazmalar, to'lovlarni to'lash) amalga oshirish imkoniyatini berish [6].

To'lovlar va tariflarni pasaytirish:

- bank hisobvaraqlarini ochish va ularga xizmat ko'rsatish, naqd pul olish, pul o'tkazmalari va boshqa operatsiyalar uchun to'lovlarni kamaytirish yoki bekor qilish;

- aholining ayrim toifalari (nafaqaxo'rlar, talabalar, kam ta'minlanganlar) uchun imtiyozli shart-sharoitlarni ta'minlash.

Aholining moliyaviy savodxonligini oshirish:

- aholining moliyaviy savodxonligini oshirishga qaratilgan ta'lim dasturlari va tadbirlarini o'tkazish;

- bank xizmatlari va mahsulotlari to'g'risida ma'lumotni arzon va tushunarli tarzda taqdim etish.

Banklarning bank bo'lmagan moliyaviy tashkilotlar bilan hamkorligi:

- chekka hududlarda moliyaviy xizmatlardan foydalanish imkoniyatlarini kengaytirish uchun mikromoliya tashkilotlari, kredit uyushmalari va boshqa bank bo'lmagan moliya institutlari bilan hamkorlik aloqalarini o'rnatish.

Innovatsion raqamli texnologiyalardan foydalanish:

- bank xizmatlaridan foydalanishni osonlashtirish va ularning xavfsizligini oshirish uchun biometrik identifikatsiya, sun'iy intellekt va blokcheyn kabi yangi texnologiyalarni joriy etish.

Davlat tashabbuslarini qo'llab-quvvatlash:

- banklarning aholiga bank xizmatlaridan foydalanish imkoniyatini oshirish dasturlarini amalga oshirish uchun davlat organlari bilan hamkorligi.

Islomiy moliyalashtirish xizmatlarini joriy qilish:

- bu xizmatlarni joriy qilish bank xizmatlari ommabopligini oshirish va investitsion faollikni tezlashtirish imkonini beradi.

Bank xizmatlaridan foydalanishning ko'payishi aholining moliyaviy integratsiyasiga, umuman mamlakatning iqtisodiy o'sishiga va rivojlanishiga yordam beradi.

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Mamatmo'minova M.G.
teacher of the method of preschool education
Faculty of preschool education

DEVELOPMENT OF CHILDREN'S SPEECH THROUGH STAGING ACTIVITIES IN PRESCHOOL EDUCATIONAL ORGANIZATIONS

Abstract. This article describes the organization of staging activities organized in a preschool educational organization and the development of speech of preschool children through them. Acting in a pre-school educational institution is one of the important factors that develop children's thinking.

Key words: staging activity, thinking, theater culture, children's theater.

The task of preschool education is to educate children in terms of the nation's rich national, cultural-historical heritage and spiritual ethics: to form children's feelings of national patriotism, to form preschool children's need for education, and to prepare them for the educational process on a regular basis, development of thinking, formation of skills of independent and free expression of one's opinion, provision of physical and mental health of children. Another of the main goals is to identify the abilities and opportunities of children through the art of staging, to properly shape them and bring them to light. The educator's role in shaping children's aesthetic abilities through staging activities in pre-school educational institutions is incomparable. He must have in-depth knowledge and high qualifications, for this he must regularly work on himself, constantly raise his scientific theoretical level, rely on advanced experiences. It was directed to adapt it both in form and content to the requirements of the time, to continuously improve the quality of education.

In the activities of the preschool educational institution, the tasks necessary for them to successfully study at school are solved. Also, during these processes, children learn to work in a team, to subordinate their actions to the actions of their friends. The staging activity of pre-school educational institutions is the artistic and aesthetic education of pre-school children. Currently, it is known that several types of theater are operating. These include: comedy theater, drama, folk theater, musical drama and comedy, opera, ballet and puppet theaters. Theater is derived from the Greek word (theatron) which means theater. The favorite spectacle of our little ones is the puppet theater. Through this theater, the children use familiar toys, teddy bears, puppies, and other characters to captivate children with their liveliness, movement, and talking. This theater brings great joy and happiness to children. It is not only for entertainment, but also for its educational meaning. It is impossible to put on big and difficult plays in kindergarten. They can put it with their toys on the basis of a small scene, a small fairy tale. Each of these small appearances makes a great impression on children and adds a cheerful spirit to the

holiday tales. Any work of art will be more understandable for children if it is shown through puppets.

After seeing the theater, children's worldview expands and remains in their memory for a long time. Shadow theater is one of the unique types of puppet theater. They play with toys made of shapes, not dolls. The audience can sit in front of the stage and see the shadows of people, animals and birds moving through the light on the screen. The researches and practical works conducted in the kindergarten show the development of creativity in children as a result of the education given to them from the kindergarten age. Creativity proved that children of preschool age can show creative activity in drawing, making toys from clay and plasticine. Of course, children's creativity has its own characteristics and cannot meet the criteria of adult creativity. The tasks of developing creative buds in a child depend on the anatomical and psychological features specific to his age. The completeness of a preschooler's perception of the quality and properties of objects depends on the level of performance of his analyzers. Research shows that 6-7-year-old children can see and perceive the main qualities of shape, proportion, color and components, as well as their position in space. Holidays. Organized holidays should bring joy to children and give them an opportunity to show their creative abilities. Educators should remember that holiday events bring joy to children. Holidays are a source of impressions that remain in the memory of children for a long time. Therefore, in the process of preparing for the holiday, first of all, it is important to pay attention to a well-prepared scenario, the participation of each child in the festive events, the mood and the harmony of art forms. Children should feel cheerful, happy and free at the holiday event. Performances of professional theater studios. Organization of performances of professional theater studios (circus, puppet theater, stage theater) in pre-school educational organizations.

Circle work. Another form of organizing children's staged activities in preschool educational organizations is circle work. It helps to solve the following issues: it develops children's fantasy, imagination, all kinds of memories, creativity (artistic speech, musical play, dance, stage). If a special theater club is established, the head of the theater club works with children who want to participate. The leader is the director, and the children act as actors. The leader sets a goal for himself, not to be limited to script, directing and staged work in working with children, he should form creativity in children during the period spent in the preschool educational organization. The main content of the circle work is work on the puppet theater, the analysis of the content of the work, the distribution of roles, etude game exercises that help to master the actions in the plot. The staging of the entire performance is held in special training sessions, once a week for 30-40 minutes in the first or second half of the day. In the process of organizing lessons, it is worth paying attention to the fact that if the child has knowledge and skills, but there is no interest and desire, there will be no activity.

Based on the issues of development of staging activities with preschool children, its content is determined and forms of organization are determined.

He will have an understanding and imagination about the rich cultural and spiritual heritage of our people and will learn to express them in his work. Every person's life is spent with games, it teaches the child to understand the rules of life of adults. Every child plays as much as he knows, but these games are mostly learned from the favorite heroes of adults and imitated. When choosing material for staging, it is necessary to take into account the children's age characteristics, knowledge skills, and at the same time, to enrich their life experience, to arouse interest in new knowledge and to give creative opportunities. should be allowed to grow. It is recommended to organize corners for stage shows in pre-school educational institutions. In conclusion, we also recommend forms of cooperation in the process of creating staging activities in preschool educational institutions. Involve children who are not active enough in the process of putting on a play in the cooperative staging activity, thus the staging activity helps them to lose their ability to think freely, shyness and shyness.

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*Mamatqulova Sh.O.
Termiz davlat pedagogika institute maktabgacha
ta'lim metodikasi kafedrası o'qituvchisi*

MAKTABGACHAYOSHDAGI BOLALARNING AQLIY RIVOJLANISHIDA O'YINNING ROLI

Annotatsiya. O'yin bolalik davrida gullab-yashnaydigan va insonni butun hayoti davomida kuzatib boradigan maxsus faoliyatdir. Hozirgi kunda o'yin maktabgacha yoshdagi bolaning etakchi faoliyati ekanligi qabul qilingan. o'yin - bu maktabgacha yoshdagi bola o'z tashabbusi va ijodiy faolligini ko'rsatadigan yagona maydon. Va shu bilan birga, aynan shu o'yinda bolalar o'zlarini boshqarish va baholashni o'rganishadi, nima qilayotganlarini tushunishadi va (ehtimol bu asosiy narsa) to'g'ri harakat qilishni xohlashadi.

Kalit so'zlar: Maktabgacha ta'lim, bola, intellektual salohiyat, o'yin.

*Mamatkulova Sh.O.
teacher
Department of Preschool Education Methodology
Termiz State Pedagogical Institute*

THE ROLE OF THE GAME IN THE MENTAL DEVELOPMENT OF PRESCHOOL CHILDREN

Abstract. Play is a special activity that flourishes in childhood and follows a person throughout his life. Nowadays, it is accepted that the game is the leading activity of the preschool child. the game is the only field where the preschool child shows his initiative and creative activity. And at the same time, it is in this game that children learn to manage and evaluate themselves, understand what they are doing and (perhaps this is the main thing) want to do right.

Key words: Pre-school education, child, intellectual potential, game.

O'zbekiston Respublikasi prezidenti Shavkat Miromonovich Mirziyoyev ta'kidlaganlaridek «Maktabgacha ta'lim – ertangi kunimizga zamin» dir. Bugungi kunda maktabgacha ta'lim tarbiyalanuvchilarining intellektual salohiyatini rivojlantirish dolzarb masalalardan biri hisoblanadi. Mazkur maqolada maktabgacha ta'lim tarbiyalanuvchilarining intellektual salohiyatini rivojlantirish va takomillashtirish dolzarb masalalari yoritib berilgan.

O'yin bolalik davrida gullab-yashnaydigan va insonni butun hayoti davomida kuzatib boradigan maxsus faoliyatdir. Hozirgi kunda o'yin maktabgacha yoshdagi bolaning etakchi faoliyati ekanligi qabul qilingan.

O'yin maktabgacha yoshdagi bolaning hayotida alohida o'rin tutadi. Tadqiqotchilar (L.S.Vygotskiy, D.B. Elkonin va boshqalar) ta'kidlashlaricha,

bolani rivojlantirish uchun pedagogikada eng muhim bo'lgan mustaqil o'yin shakllari. Bolaning shaxsiyati o'yinlarda eng aniq namoyon bo'ladi.

Nazariy jihatdan, o'yin turli nuqtai nazardan qaraladi. O'yin dunyoni kashf qilishning bir usuliga o'xshaydi, chunki o'ynayotgan bola o'z dunyosini yaratadi; o'yin bolaning umumiy aqliy rivojlanishiga ta'sir qiladi; o'yin ijtimoiy tajribani o'zlashtirishga yordam beradi.

K.D. Ushinskiy o'yinni bolani atrofdagi kattalar dunyosining barcha murakkabliklariga kirishish usuli sifatida aniqladi. Taqlid orqali bola insoniy munosabatlarning asosiy jihatlarini takrorlaydi va o'zlashtiradi. D.V. Menjeritskaya o'yini axloqiy va ijtimoiy fazilatlarni rivojlantirish bo'yicha muammolarni hal qilish uchun ishlab chiqilgan va o'yin rivojlanish xususiyatiga ega bo'lishi kerak va kattalar nazorati ostida amalga oshiriladi. Bolaning har tomonlama rivojlanishi sifatida o'yinning ahamiyatiga qaramay, o'yin o'quv faoliyati bilan chetlashtirilmogda. Ko'pincha ota-onalar farzandlarini bilim olishga tayyorlashga bag'ishlaydilar. Shuning uchun bolaning maktabgacha yoshdagi shaxsini shakllantirishning eng yaxshi va tasdiqlangan vositasi - bu bolaning o'zi faol faoliyati. O'yin bu borada bir qator afzalliklarga ega. Bu bolalar hayotida muhim nazorat vositasi bo'lib, u bolalikdagi o'z -o'zidan paydo bo'lish, ijobiy his -tuyg'ular va harakatlarning namoyon bo'lishi uchun katta imkoniyat yaratadi. Rolli va qurilish o'yinlarining tabiati bolalarda yaxshi va mazmunli munosabatlarni tarbiyalashga yordam beradi. Turli qoidalarni o'rganish bolalar o'rtasidagi munosabatlarni tartibga solishga yordam beradi. Bolaga faollik kerak, bu uning hayotiyligini oshirishga, uning manfaatlarini, ijtimoiy ehtiyojlarini qondirishga yordam beradi. O'yin katta tarbiyaviy ahamiyatga ega, u kundalik hayot kuzatuvlari bilan sinfda o'rganish bilan chambarchas bog'liq. Ijodiy o'yinlarda bolaning aqliy qobiliyatlarini, uning tasavvurini, diqqatini, xotirasini safarbar qiladigan bilimlarni o'zlashtirishning muhim va murakkab jarayoni sodir bo'ladi.

Kattalar ishiga, jamoat hayotiga, sovet xalqining qahramonlik ishlariga qiziqishning rivojlanishi bilan bolalarda kelajak kasbining birinchi orzusi, sevimli qahramonlariga taqlid qilish istagi paydo bo'ladi. Bularning barchasi o'yinni maktabgacha bolalik davrida shakllana boshlagan bolaning shaxsiyat yo'nalishini yaratishning muhim vositasiga aylantiradi.

O'yinlarni shartli ravishda ikkita asosiy guruhga bo'lish mumkin: rolli va qoidali o'yinlar.

Rolli o'yinlar - bu kundalik mavzulardagi o'yinlar, tetralizatsiyalangan o'yinlar, o'yinlar - o'yin-kulgi, o'yin-kulgi. Qoidalari bo'lgan o'yinlarga didaktik o'yinlar va ochiq o'yinlar kiradi. Bolaning syujetli-rolli o'yini ijodiy xarakterga ega bo'lib, unda bolalar rol o'ynaydi va hikoya chizig'i yordamida kattalar faoliyati va munosabatlarini takrorlaydi. Bunday o'yinlarda bolalar qiziqarli ixtirolarga qodir, ular o'zlari u yoki bu o'yinga xilma -xillik olib keladi. Bolalarning tashabbusi nafaqat bitta bolani, balki butun guruhni tarbiyalashga katta ta'sir ko'rsatadi.

Qoidalarga ega bo'lgan o'yinlar boshqa maqsadga ega: ular fikrlash, his - tuyg'ular va nutq, ixtiyoriy e'tibor va xotira, turli harakatlar uchun zarur bo'lgan tizimli mashqlarni bajarish imkoniyatini beradi. Qoidalarga ega bo'lgan har bir o'yin o'ziga xos didaktik vazifaga ega, lekin oxir -oqibat u asosiy ta'lim vazifalarini hal qilishga qaratilgan. Ayniqsa, didaktik o'yinlar bolalar uchun o'yin -kulgi va mazmuni bilan qiziq: taxmin qiling, toping, nom bering. Bolalar o'yinda ma'lum qoidalarga amal qilib natijalarga erishadilar. O'yin muammosining sifatiga qiziqish o'zini namoyon qiladi: naqshni ehtiyotkorlik bilan burish, to'g'ri, rasmni olish va hk. Qiziqarli o'yin bolaning aqliy faolligini oshiradi va u darsdan ko'ra qiyinroq masalani hal qila oladi. Ammo bu mashg'ulotlar faqat o'yin shaklida o'tkazilishi kerak degani emas. O'rganish turli usullarni talab qiladi. O'yin faqat boshqa usullar bilan birgalikda yaxshi natijalar beradi: kuzatish, suhbat, o'qish va hk. o'ynab, bolalar o'z bilim va ko'nikmalarini amalda qo'llashni o'rganadilar. Qoidalarga ega bo'lgan o'yinlarda, bilimlarni umumlashtirish, muammoni hal qilishda mustaqil tanlov talab qilinadi.

Ammo bolani hayotining ongli mavzusiga aylantiradigan, uning xatti-harakatlarini ongli va o'zboshimchalik qiladigan uning harakatlarining aynan shu mustaqil tartibga solinishi. Albatta, bu zamonaviy bolalar o'zini tutish qoidalarini - kundalik, ta'limiy, muloqot, yo'l harakati va hokazolarni o'zlashtira olmaydi degani emas, lekin bu qoidalar tashqaridan, kattalardan kelib chiqadi va bola ularni qabul qilishga va moslashishga majbur bo'ladi. ularga.

O'yin qoidalarining asosiy afzalligi shundaki, ularni bolalar o'zlari ixtiyoriy va mas'uliyatli tarzda qabul qilishadi (yoki yaratadilar), shuning uchun nima va qanday qilish kerakligi haqidagi fikrlar istaklar va hissiyotlar bilan birlashtirilgan. Rivojlangan o'yin shaklida bolalarning o'zi to'g'ri harakat qilishni xohlaydi. Bunday qoidalarning o'yindan chetlashishi zamonaviy bolalar uchun o'yin «ixtiyoriy xatti-harakatlar maktabi» bo'lishdan to'xtaganligini ko'rsatishi mumkin, ammo 3-6 yoshli bola uchun boshqa hech qanday mashg'ulot bu vazifani bajara olmaydi. Lekin o'zboshimchalik-bu faqat qoidalarga muvofiq harakatlar emas, balki xabardorlik, mustaqillik, mas'uliyat, o'zini tuta bilish, ichki erkinlikdir. O'yinni yo'qotib, bolalar bularning hammasini qo'lga kiritishmaydi. Natijada, ularning xulq -atvori vaziyatli, beixtiyor, atrofdagi kattalarga bog'liq bo'lib qoladi.

Kuzatishlar shuni ko'rsatadiki, zamonaviy maktabgacha yoshdagi bolalar o'z faoliyatini qanday tashkil qilishni, uni ma'no bilan to'ldirishni bilishmaydi: ular aylanib yurishadi, itarishadi, o'yinchoqlarni saralashadi va hokazo. Ularning aksariyati rivojlangan tasavvurga ega emas, ijodiy tashabbus yo'q va mustaqil fikrlash. Maktabgacha yosh bu eng muhim fazilatlarini shakllantirishning eng maqbul davri bo'lgani uchun, bu qobiliyatlarning barchasi keyinchalik, etuk yoshda o'z-o'zidan paydo bo'lishi haqidagi tasavvurlarni yashirish qiyin. Ayni paytda, ota -onalar, odatda, bu muammolarga unchalik ahamiyat bermaydilar.

Bolalar bog'chasi ishining samaradorligi va bolaning farovonligining asosiy ko'rsatkichi-bu maktabga tayyorgarlik darajasi, bu hisoblash, o'qish, yozish va kattalarning ko'rsatmalariga amal qilish qobiliyatida namoyon bo'ladi. Bunday

«tayyorlik» nafaqat maktabda o'qishga hissa qo'shmaydi, balki to'sqinlik qiladi: bolalar bog'chasida majburiy o'qishdan charchagan bolalar ko'pincha maktabga borishni xohlamaydilar yoki boshlang'ich sinflarda o'qishga qiziqishni yo'qotadilar.

Erta ta'limning afzalliklari maktab hayotining dastlabki 2-3 oyidayoq seziladi - bunday «tayyor» bolalarni endi o'qish va hisoblashni o'rgatishning hojati yo'q. Ammo siz mustaqillik, qiziquvchanlik, qaror qabul qilish va fikrlash qobiliyatini namoyon qilishingiz bilanoq, bu bolalar taslim bo'lishadi va kattalarning ko'rsatmalarini kutishadi. Aytishga hojat yo'q, bunday passivlik, qiziqish va mustaqillikning yo'qligi, ichki bo'shliq nafaqat maktabda, balki juda achinarli natijalarga olib keladi.

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Mardonov Z.M.
O'zbekiston davlatsan'at va madaniyat instituti
«Milliy qo'shiqchilik» kafedrası
o'qituvchisi

OGAHIYNING O'ZBEK MUMTOZ ADABIYOTI RIVOJIDA QO'SHGAN HISSASI

Annotatsiya. Badiiy so'zning ma'no miqyoslaridan keng foydalanish, yangi ma'no qirralarini topish jihatidan ham Ogahiy Navoiydan keyin «eng ko'p va eng xo'b aytqon» shoirlardandir.

Kalit so'zlar: Kuy, navo, g'azal, san'atkor, badiiy so'z.

Mardonov Z.M.
teacher
Department of «National Singing»
State Institute of Art and Culture of Uzbekistan

OGAHI'S CONTRIBUTION TO THE DEVELOPMENT OF UZBEK CLASSICAL LITERATURE

Abstract. After Ogahi Navoi, he is one of the «most and most eloquent» poets in terms of wide use of the meaning scales of the artistic word and finding new aspects of meaning.

Key words: melody, navo, ghazal, artist, artistic word.

Ogahiy xalq orasida ko'proq lirik shoir sifatida mashhur. Ogahiy «til tiyg'i tortib, maoni mulkini olgan» mahoratli san'atkordir, uning badiiy qudrati haqida fikrlashishdan avval, shuni e'tirof etish lozimki, yosh Muhammadrizoning «til tiyg'i» Alisher Navoiy mahoratmaktabida charxlangan, sayqal topgan. Ogahiy nazmida Navoiydan o'rganish izlari, ulug' san'atkor ta'siriga berilish, udan qutila olmaslik, ustozning turli g'oyava ifodalarni o'zgacha talqinlarda sharhlash ham ko'rinib qoladi. Bunday holler shoirning kamchiligi sifatida emas, balki badiiy mahorat qozonishyo'lidagi dastlabki tajriba, har bir ijodkor tabiiy va qonuniy ravishta boshdan kechiradigan ijodiy jarayon tarzida baholanmog'I ma'quldur. Ulug' Navoiyga ergashish, uning asarlaridan iqtibos olish, fikr-g'oyalarni sharhlash barcha Navoiyga izdosh o'zbek mumtoz shoirlari qatori Ogahiyga ham fazlu iftixor sanalgan:

Ogahiy kim topqay erdi sozi nazmindan navo,
Baxrga gar yo'qdur Navoiyning navosidan sango.

Badiiy so'zning ma'no miqyoslaridan keng foydalanish, yangi ma'no qirralarini topish jihatidan ham Ogahiy Navoiydan keyin keyin «eng ko'p va eng xo'b aytqon» shoirlardandir. U ataylab badiiy san'at qo'llamaydi, uning qalamiga

tushgan so‘z san‘at bo‘lib muxrlanadi. Mazkur baytda kamdan kam san‘atkor yaratishga muvassar bo‘lgan nodir ma‘naviy san‘at – iyhom yuzaga kelgan. «So‘z» - til birligi, kalmia ma‘nosida qo‘llangani aniq ravshan anglashilib turibti. Shu ma‘no bilanoq baytdan tugal mazmun chiqadi. Iyhom san‘atining sehri shundaki, shoir forsiy tildagi «so‘z» ning ma‘nolarini ham bir yo‘la mujassamlashtirilgan. «So‘z»ning yonish, kuyish, harortli bo‘lsa ma‘nolari yashirin ifodalangan. Aslida shoirning bosh muddaosi «so‘z»ning shu ma‘nolardan kelib chiqadi. Iyhomning xosiyati shunda.

Bu o‘rinda ham bayt badiyatini iyhom san‘ati yuzaga keltirgan. Bunda san‘at «|so‘rsam» so‘zidabo‘lib, uning ko‘rinib turgan ma‘nosi «so‘ramoq» pinhonama‘nosi esa «bo‘sa olmoqdir» Bilmagam kishi yuzaki ma‘nonigina tuyin ham zavqlanishi mumkin. Ziyrak kitobxonh esa badiiy so‘zning ham zohiriy, ham botiniy ma‘nolariniyib, ikki xissa ta‘sirlanadi. Badiiy fikrni, xususan, pandnoma mazmunidagi fikrni quruq va yalang‘och aytish Sharq adabiyotida rasm bo‘lmagan. Aks holda, adabiyot hayotiylik, ta‘sirchanlik, donishmandlik kasb etolmasdi. Ushbu adabiyot uslubiga xos xususiyatlartidan biri qiyosiy-istoraviy yo‘sinni qo‘llab, aytilachak har bir gapni hayot va tabiat tarozisida tortib aytishdir. Shunday uslub taqozosi tarzida tamsil, husni ta‘til singari badiiy san‘atlar vujudga kelgan. Tamsil san‘ati talabiga ko‘ra, shoir birinchi misrada hurmat, odab to‘g‘risidagi fikrini ifodalaydi va ikkinchi misradashu fikrning hayotiy isboti tariqasida tabiatning hikmatli bir holatining misol keltiradi. Husni ta‘til san‘ati8da ham shunga yaqin usul qo‘llaniladi. Shoir badiiy fikrni chiroyli asoslash yo‘lidan boradi:

Kelgil, ey o‘tlug‘ ko‘ngul, eski chopong‘a qone o‘l,
Kim, hamisha jismig‘a kuldan qilur axgar libos.

Ushbu baytninochor holda, eski chopon yopishib yashagan shoirningo‘z-o‘ziga tasallisi o‘rnida ham qabul qilish mumkin. Ammo undan elga qaratilgan hokisorlikka, kamtarlikka davit ham anglashib turibti. Ikkinchi misrada hammaga ma‘lum va mashhur hayotiy lavha – cho‘g‘ningkul bilan qoplanganligi aytilgan fikrga juda mutanosib chiroyli badiiy asos tarzida keltiriladi. «Ta‘viz ul-oshiqin» XIX asrda gullab-yashnagan Xorzam adabiy muhitninggo‘zal gultojidir. Undagi asarlar til xususiyatlariga ko‘ra tushunrli, soda, jozibali, xalqchildir. Bu soddalik, ayniqsa, Xorazm adabiy muhitningulug‘ rahnomosi, Ogahiyning ustoz Shermuhammad Munisning «Munis ul-ushshoq» devonidagi asarlar qiyosida yaqqol ko‘zga tashlanadi. Munis adabiy maktabian ilhon va rivoj topgan Ogahiy ijodi tobora jo‘shqin va tiniq tus olgan. Uning har bir mavjida o‘zgacha joziba jilovlanaveradi. Masalan, irsoli masal san‘ati na‘munalariga uchrar ekansiz, shoirning xalq og‘zaki ijodi boyliklarini ne chog‘lio‘zlashtirganiva adabiy muddao ifodasi yo‘lida ulardan qanchalik o‘rinli foydalanish mahoratiga ishonch hosil qilasz:

Xunob ichar vaqtimda xush kelding, ko‘ngulkim, xalq aro,
Yaxshi masaldurkim: «Kelur yaxshi kishi osh ustina».

Ogahiydek mukarram zotlar tengsizlik va manfaatparazlik ustuvor zamonda karam ko'rmay, «ahli diramg'a» xor bo'lib yashagach, yana bir sherda qoyilmaqom aytilgandek Ogahiy badiiy so'z imkoniyatlaridan bahramand bo'lgani sher va ixlosmandlarini bahramand etganidan ogoh bo'ldik. Ammo mumtoz adablarimiz tasaruffida yana shunday imkoniyat ham bor ediki, ular eski o'zbek alifbosidagi har bir harf shaklidan badiiy ta'svir vositasi sifatida foydalanish baxtiga muyassar edilar. Ogahiy asarlari badiyatida ham alifbo muhimo'rin tutgan.⁶¹

Ogahiy o'zbek mumtoz adabiyotining badiiy timsollari tizimini muakammal o'zlashtirgan va ularni ma'no va shakily tomondan takomillashtirishga harakat qilgan shoirdir. Birgina chumoli timsolining takomil tarixiga nazar solaylik. An'anaviy chumoli yoki mo'r obrazining butun o'zbek mumtoz sheriya, jumladan, Navoiy nazmida qo'llanish miqiyoslari, ma'no doirasi, badiiy vazifasi muhtaram o'quvchiga ayon. U- kamtarlik, xokisorlik, mehnatkashlik, sahovatpeshalik timsoli. Uning barcha sifatleri chumoli va mo'r atamalarida mujassam edi. Obrazning ma'no ufqini kengaytirish maqsadida Ogahiy oddiy «mo'r» emas, «xasta mo'r» – cho'loq chumoli timsolidan foydalanadi:

Yo'ki, g'alat ayladim, o'ylakki, bir xasta mo'r

Chekkusi poyi malax tuhfa Sulaymon sori.

«Xasta» sifati orqali shoir chumoli obrazida ulug'vorlik, olimhimmatlik fazilatlarini mujassamlashtirgan. Ogahiy talqinidagi chumoli jismi ushoqqina, hasta bo'lishiga qaramay, Sulaymonga sovg'a qilish uchun o'z jussasidan necha barobar kattalikdagi maxal- chigirtka oyog'ini sudrab, bormoqda. Sulaymonga loyiq tuhfa olib borish ma'sulyati, or-nomus, himmatningzo'ri xasta, zaif chumoliga g'ayrat-shijoat, ulug'vorlik bag'ishlangan. Chumoli bilan Sulaymon munosabatlaridagi qarama-qarshilik an'anaviy hol edi. Chumolining hasta bo'lishi va tuhfa uchun ulkan chigirtkaoyog'ini tanlashi mavjud badiiy ziddiyatni yanada kuchaytirgan. Ogahiyning adabiy merosi xalqimiz ardog'idagi mo'tabar manaviy hazina. Uning qadr-qimmatizamon o'tgan sari ortib boradi. Uning nasihatimiz, ma'shuqona, oshiqona, shahdomuz g'azallari, shavqangez qasidalari, shakarrez muxammaslari, ayniqsa, bugungi tarixiy davrda insoning manaviy olamini qayta ko'rishda, milliy mustaqillik mafkurasini yaratishda jondek aziz, suv va havodek zarur. Zamondoshlarimiz va kelgusi avlod «Ta'viz ul-oshiqin»dagi durdona asarlarni, Ogahiy orzulaganidek, «oshiqlar tumori yanglig' ixloslari bo'yunlarig'a osib, izzat bila asrasalar», bu muqaddas tumor ularni manaviy-moddiy ofatlardan omon saqlaydi, kamolot sari eltadi. Shubhasiz Ogahiy ma'lum darajada an'anaviylikni hush ko'rgan. Negaki o'tmish adabiyotimizdagi ko'plab boqiy kitoblarning yaratilishiga o'z davrining homiy va rahnamo hukmdorlari sabab bo'lganlar.

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Mavlonov Sh.Sh.
o'qituvchisi
DPI
Xolmo'minov A.
ShDPI
talabasi

IQTISODIY MANBAALARDAN SAMARALI FOYDALANISHDA YASHIL IQTISODIYOTNING O'RNI

Annotatsiya. Ushbu maqola tabiiy iqtisodiy manbaalardan samarali foydalanishda yashil iqtisodiyotning o'rni, yashil iqtisodiyotning mazmun mohiyati, tabiat ne'matlaridan oqilona foydalanishning iqtisodiy muammolari va yechimlari haqida fikrlar bayon etilgan.

Kalit so'zlar: Yashil iqtisodiyot, tabiiy-iqtisodiy manbaalar, iqtisodiy rivojlanish, raqamli iqtisodiyot.

Mavlanov Sh.Sh.
teacher
ShDPI
Kholmominov A.
ShDPI
student

ROLE OF GREEN ECONOMY IN EFFICIENT USE OF ECONOMIC RESOURCES

Abstract. This article describes the role of and green economy in effective use of natural economic resources, the essence of green economy, economic problems and solutions of rational use of natural resources.

Key words: Green economy, natural and economic resources, economic development, digital economy.

Mamlakat iqtisodiyotini barqaror rivojlantirish yashil iqtisodiyot sharoitida tabiatdan foydalanishning holati va atrof-muhit muhofazasi ekoturizm bilan chambarchas bog'liqdir. Shu boisdan raqamli iqtisodiyot sharoitida yashillikni muhofaza qilish va tabiiy resurslardan oqilona foydalanishning iqtisodiy mexanizmlarini yaratish katta ahamiyatga ega bo'lib, tabiatda yuz berayotgan ijobiy va salbiy o'zgarishlarni iqtisodiy jihatdan tahlil qilish natijalari orqali kishilik jamiyatining xo'jalik faoliyatiga miqdoriy ko'rsatkichlar asosida baho berish mumkin.

Bozor iqtisodiyotini rivojlantirish orqali yashil iqtisodiyotdan foydalanishda tabiiy resurslardan foydalanuvchilarning barchasi ham uning noz-ne'matlaridan bir xilda, bir

miqyosda iste'mol qilmaydi: ba'zilar ko'proq, ayrimlari kamroq darajada moddiy boyliklarni iste'mol muomalasiga kiritadi. Jumladan, xomashyoni qayta ishlovchi barcha korxonalar tabiatda chiqindi resurslarni yig'adi, hamda tabiiy muhitga salbiy ta'sir ko'rsatadi. Darhaqiqat, tabiatga ekologik ta'sirni iqtisodiy hisoblash yo'llari bilan tahlil qilish natijasida ishlab chiqarishning daromad miqdorini oshirish masalalarining ayrim yechimlarini ham topish mumkin «Yashil iqtisodiyot» tushunchasi tabiat boyliklaridan foydalanishni me'yorlashtirishni iqtisodiy jihatdan ilmiy asoslash orqali samaradorligini baholash, atrof-muhitning ifloslanishi oqibatida ko'rilayotgan iqtisodiy-ijtimoiy zararlarni bartaraf etishga qaratilgan maqsadli dasturlarni amalga oshirish natijasida erishiladigan iqtisodiy samaradorlikni hisoblash usullarini o'rgatadi. Tabiiy resurslardan samarali foydalanish bo'yicha ilmiy asoslangan tavsiyalar yaratish, tabiatni muhofaza qilishni moliyalashtirish, rejalashtirish va boshqaruvning asoslarini takomillashtirish bo'yicha yangi tadqiqot yo'nalishlarini izlash va asoslash eng asosiy vazifalardan biridir.

O'zbekiston Respublikasi Prezidentining 04.10.2019 yildagi PQ-4477-son 2019 — 2030-yillar davrida O'zbekiston Respublikasining «yashil» iqtisodiyotga o'tish strategiyasini tasdiqlash to'g'risida qarorining asosiy maqsadlaridan birida;

«texnologik modernizatsiyalash va moliyaviy mexanizmlarni rivojlantirish orqali iqtisodiyotning energiya samaradorligini oshirish va tabiiy resurslardan oqilona foydalanish; davlat investitsiyalari va xarajatlarining ustuvor yo'nalishlariga ilg'or xalqaro standartlarga asoslangan «yashil» mezonlarni kiritish; davlat tomonidan rag'batlantirish mexanizmlarini, davlat-xususiy sherikchilikni rivojlantirish hamda xalqaro moliyaviy institutlar bilan hamkorlikni faollashtirish orqali «yashil» iqtisodiyotga o'tish yo'nalishlari bo'yicha tajriba-sinov loyihalarini amalga oshirishga ko'maklashish; ta'limga investitsiyalar kiritishni rag'batlantirish, yetakchi xorijiy ta'lim muassasalari va ilmiy-tadqiqot markazlari bilan hamkorlikni rivojlantirish hisobiga «yashil» iqtisodiyotdagi mehnat bozori bilan bog'liq kadrlarni tayyorlash va qayta tayyorlash tizimini rivojlantirish; Orolbo'yidagi ekologik inqirozning salbiy ta'sirini yumshatish choralari ko'rish; «yashil» iqtisodiyot sohasida, shu jumladan ikki tomonlama va ko'p tomonlama shartnomalar tuzish orqali xalqaro hamkorlikni mustahkamlash»⁶² kabi eng muhim masalalari ham iqtisodiy manbaalardan samarali foydalanishda yashil iqtisodiyotning o'rni ushbu sohaning ham asosiy vazifasi hisoblanadi.

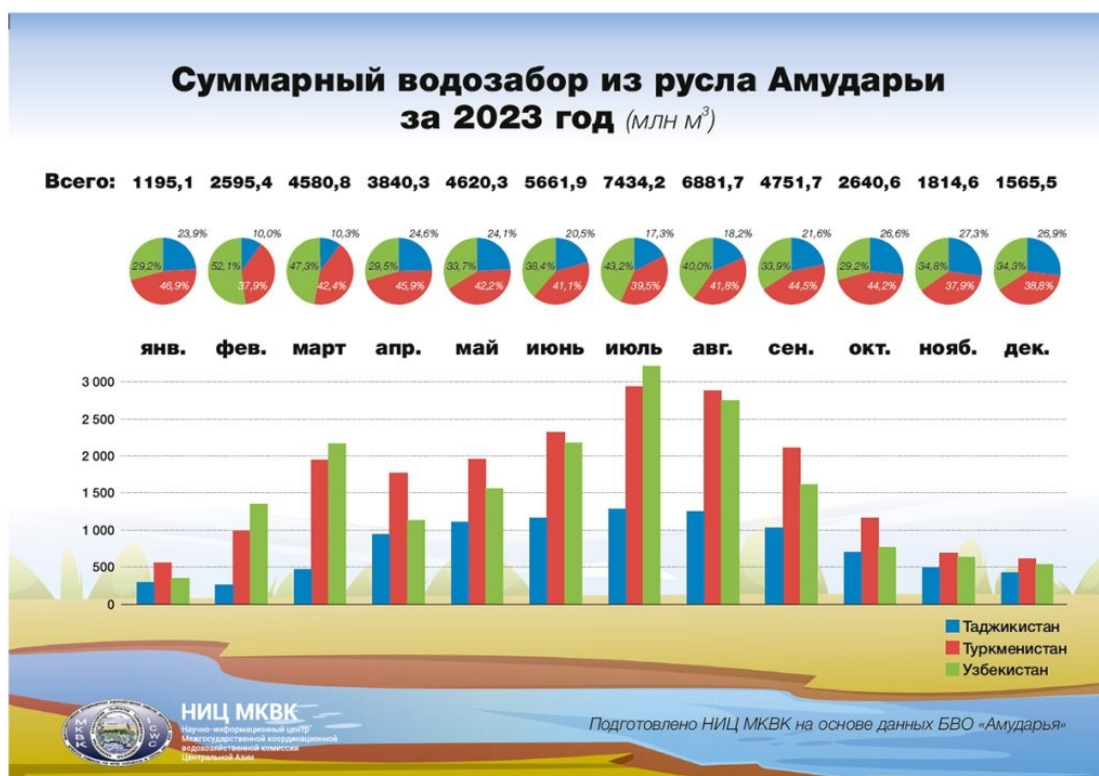
Yashil iqtisod iqtisodiy o'sishga e'tibordan voz kechishni va uzoq muddatda barqaror bo'lishi mumkin bo'lgan yagona iqtisodiyot turi bo'lgan «davlat, yashil iqtisodiyotiga» o'tishni taklif qiladi. Barqaror yashil iqtisodiyotda sayyora chegarasi hurmat qilinadi va shuning uchun eng kam manba hisoblanadi. Bu bizni iloji boricha oqilona foydalanishimiz, iqtisodiyot unumdorligini oshirish

⁶² O'zbekiston Respublikasi Prezidentining qarori, 04.10.2019 yildagi PQ-4477-son2019 — 2030-yillar davrida O'zbekiston Respublikasining «yashil» iqtisodiyotga o'tish strategiyasini tasdiqlash to'g'risida

va shu bilan birga undan foydalanishimizni kamaytirishimiz kerak degan xulosaga olib keladi. Yashil iqtisodiyotning rivojlanishida tabiiy resurs salohiyatidan foydalanishning barcha jabhalarini, hamda uni muhofaza qilishga yo'naltirilgan tadbirlarni, shuningdek, qayta tiklanadigan tabiiy resurslarni muntazam tiklab borish, miqdorini ko'paytirish, sifatini yaxshilash, tabiatning muhofazaga muhtoj obyektlarni qo'riqxonalariga aylantirish kabi faoliyatlarning iqtisodiy samarasining tahliliy natijalari hisoblanadi. Mana shu jarayonlarni amalga oshirish uchun tabiat ne'matlaridan oqilona foydalanishning bir qancha vazifalarini tahlil qilib chiqamiz:

- ❖ tabiiy muhitning mahsuldorligini oshirish uchun sharoit yaratish,
- ❖ tiklanmaydigan tabiiy resurslardan o'ta tejamkorlik bilan samarali foydalanish,
- ❖ atrof-muhitni ifloslanishdan saqlash;
- ❖ tabiiy resurslardan samarali foydalanishning iqtisodiy-ekologik tamoyillarini ishlab chiqish;
- ❖ tabiiy resurslarning hozirgi va kelgusi avlodlar uchun saqlash va tiklashning iqtisodiy-ekologik tadbirlarini ishlab chiqishdan iborat.

Iqtisodiy manbaalardan samarali foydalanishda yashil iqtisodiyotning o'rnini aniqlashimizda tabiiy nmanbaalar orasida suv eng aosiy qayta tiklanmaydigan manbaa hisoblanadi. Respublikamiz va qo'shni davlatlar bo'ylab suv resurslaridan samarali foydalanish va uni asrab avaylash ham bugungi kunning bosh masalasi hisoblanadi. Statistik ma'lumotlarga tayangan holda 2023-yilda Amudaryo suvidan qaysi davlat qancha miqdorda foydalangani ilmiy asoslar yordamida tahlil qilib chiqamiz. Meteojournal xabariga ko'ra, o'tgan yili Afg'onistonni hisobga olmaganda Amudaryo suvidan uch mamlakat



(O‘zbekiston, Turkmaniston va Tojikiston) taxminan 47,58 km kub foydalangan. Daryo suvidan eng ko‘p foydalangan mamlakat Turkmaniston bo‘lgan. U sarflangan suvning jami 42 foizini (qariyb 20 km kub) ishlatgan. O‘zbekiston o‘tgan yili Amudaryoning umumiy sarflangan suvining 38,4 foizi (taxminan 18,3 km kub), Tojikiston esa 19,8 foizidan (taxminan 9,4 km kub) foydalangan. Oylar kesimida ham Turkmaniston daryodan eng ko‘p foydalanuvchi bo‘lgan. Faqat fevral, mart va iyul oylarida O‘zbekiston Turkmanistonga nisbatan ko‘proq suv olgan.⁶³

Ushbu tahliliy jarayonni yuqoridagi diagramma orqali ko‘rishimiz mumkin bo‘ladi.

Yashil iqtisod, shuningdek, butun murakkab ekologiyasi va xilma-xil turlari bilan yer sayyorasining butun tizimini ko‘rib chiqish uchun bizning yagona turimizdan tashqari tashvish doirasini kengaytiradi. Yashil iqtisodiyot tomonidan taklif qilingan yechim esa tabiiy jarayonlarga ehtiyotkorona bo‘lishimizdir. Yashil iqtisodiyot haqida turli qarashlar mavjud. Bizning ilmiy qarashimiz esa yashil iqtisodiyotni rivojlantirish uchun shundek texnologiya ishlab chiqilishi kerakki bunda tabiatga hech qanday zarar yetmasligi darkor. Xulosa o‘rnida shuni ta’kidlash joizki, yashil iqtisodiyotni rivojlantirish orqali mamlakat iqtisodiyotni jadal suratlar bilan o‘rishiga erishamiz.

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*Mavlonov A.M.
Buxoro davlat pedagogika instituti, g.f.n., dotsent
Mavlonov R.M.
BuxDPI, Aniq va tabiiy fanlari o'qitish metodikasi
(geografiya) magistratura mutaxassisligi 2- bosqich magistranti*

UMUMTA'LIM MAKTABLARIDA GEOGRAFIYA FANIDAN AMALIY MASHG'ULOTLARNI TASHKIL ETISH

Annotatsiya. Geografiya ta'limning asosiy fanlaridan biri bo'lib, o'quvchilarga atrof-dagi dunyoni, uning tuzilishi va xususiyatlarini tushunishga yordam beradi. Geografiyani o'rganishning muhim jihati – o'quv materialini chuqurroq o'zlashtirish va o'quvchilar malakasini oshirishga yordam beradigan amaliy mashg'ulotlarni tashkil etishdir. Ushbu maqolada umumta'lim maktablarida geografiya fanidan amaliy mashg'ulotlar tashkil etishning ahamiyatini ko'rib chiqamiz.

Kalit so'zlar: Geografiya, amaliy mashg'ulotlarni tashkil etish, o'quvchilar faolligi.

*Mavlanov A.M., Ph.D.
associate professor
Bukhara State Pedagogical Institute
Mavlanov R.M.
BuxDPI
2nd stage master's student
master's degree in the methodology
of teaching exact and natural sciences (geography)*

ORGANIZING PRACTICAL COURSES IN GEOGRAPHY IN HIGH SCHOOLS

Abstract. Geography is one of the main subjects of education, which helps students to understand the surrounding world, its structure and characteristics. An important aspect of studying geography is the organization of practical activities that help to master the educational material in depth and improve students' skills. In this article, we will consider the importance of organizing practical training in geography in secondary schools.

Keywords: Geography, organization of practical training, student activity.

Geografiy fanidan amaliy mashg'ulotlar o'quvchilarning fazoviy tafakkurini, tahliliy ko'nikmalarini rivojlantirish va dunyoning turli mintaqalari haqidagi bilimlarini boyitishda muhim ahamiyat kasb etadi. Amaliy topshiriqlar

orqali o'quvchilar nazariy bilimlarni amaliyotda qo'llashlari mumkin, bu esa ularni yaxshiroq o'zlashtirish va tushunishga yordam beradi.

Amaliy mashg'ulotlarni samarali tashkil etish uslublari

Amaliy geografiya darslarini samarali o'tkazish o'quvchilarga fanni o'rgatishda asosiy o'rin tutadi. Geografiya - dunyo, uning tuzilishi, tabiiy sharoiti, iqtisodiyoti, aholisi va boshqa jihatlar haqidagi fan. Amaliy mashg'ulotlar o'quvchilarga materialni yaxshiroq tushunish va eslab qolish, shuningdek, geografiyani muvaffaqiyatli o'rganish uchun zarur bo'lgan ko'nikma va ko'nikmalarni rivojlantirish imkonini beradi.

Geografiy fanidan amaliy mashg'ulotlarni samarali tashkil etish uchun o'qitishning turli usullaridan foydalanish zarur. Bunga ekskursiyalar berish, loyihalar yaratish, interaktiv xaritalar va onlayn resurslardan foydalanish va o'yinga asoslangan o'rganish kiradi. Turli usullar o'quvchilarni qiziqtirishga, darslarni qiziqarli va qulayroq qilishga yordam beradi. [4, 7]

Quyida amaliy geografiya mashg'ulotlarini samarali tashkil qilishda yordam beradigan asosiy fikrlar keltirilgan:

1. Darsning maqsadi va vazifalari: Darsning aniq maqsad va vazifalarini belgilang, shunda o'quvchilar dars oxirida nimaga erishishlari kutilayotganligini bilishadi. Bu ularga materialning muhim jihatlariga e'tibor berishga yordam beradi.

2. O'qitishning turli usullaridan foydalanish: Darsga turli xil o'qitish usullarini, masalan, guruhlarda ishlash, bahs-munozaralar, o'yinlar, amaliy mashg'ulotlar va hokazolarni kiritish. Bu o'quvchilarga materialni yaxshiroq tushunishga va o'quv jarayonini diversifikatsiya qilishga yordam beradi.

3. Ko'rgazmali qurollardan foydalanish: Geografiya fani xaritalar, diagrammalar va boshqa ko'rgazmali materiallar tasvirlari bilan chambarchas bog'liq. Ma'lumotni vizual tarzda taqdim etish va o'quvchilarga murakkab tushunchalarni tushunishga yordam berish uchun ularni sinfda foydalaning. [5, 38]

4. Amaliy topshiriqlarni qo'llash: O'quvchilarga olgan bilimlarini amaliyotda qo'llash imkoniyatini berish. Bu kartografik vazifalarni bajarish, dala tadqiqotlarini o'tkazish yoki geografiya muammolarini hal qilish bo'lishi mumkin.

5. Fikr-mulohaza: O'quvchilarning ishini baholash va ularga fikr bildirishni unutmang. Bu ularning xatolarini tushunishga va malakalarini oshirishga yordam beradi. [3, 441]

Ushbu ko'rsatmalarga rioya qilish orqali o'qituvchilar o'quvchilarga materialni yaxshiroq tushunish va eslab qolish, shuningdek, ushbu qiziqarli fanni muvaffaqiyatli o'rganish uchun zarur bo'lgan ko'nikma va ko'nikmalarni rivojlantirishga yordam beradigan samarali, amaliy geografiya darslarini yaratishi mumkin. [2, 5]

O'quvchilarni mashg'ulotda faol ishtirok etishga jalb qilish usullari

Geografiya darslarini muvaffaqiyatli tashkil etishda o'quvchilarni amaliy mashg'ulotlarga faol jalb etish muhim o'rin tutadi. O'quvchilarning mustaqilligi,

tashabbuskorligi, ijodiy fikrlashini rag'batlantirish ularning darsda faol ishtirok etishiga, chuqurroq o'rganishiga yordam beradi. [6, 41]

Amaliy geografiya darslarida maktab o'quvchilarining faol ishtirok etishi ularning o'zlashtirishida muhim o'rin tutadi va o'quv materialini to'g'ri tushunish imkonini beradi. Darslarda faol qatnashgan o'quvchilar fanni o'rganishga qiziqishi ortib, ma'lumotni yaxshi eslab qoladi, ko'nikma va malakalarini rivojlantiradi. Amaliy geografiya darslarida maktab o'quvchilarining faol ishtirokini ta'minlash uchun quyidagi usul va usullardan foydalanish mumkin:

1. Ta'limning interfaol usullaridan foydalanish: maktab o'quvchilarini munozaralarga jalb qilish, guruh loyihalari, o'yinlar va boshqa interfaol tadbirlarni o'tkazish ularning darsda faol ishtirok etishiga va materialni muhokama qilishga yordam beradi.

2. Amaliy topshiriqlarni bajarish: o'quvchilarga olgan bilimlarini amaliyotda qo'llash imkoniyatini berish, masalan, dala tadqiqotlarini o'tkazish, xaritalar chizish yoki geografik ma'lumotlarni tahlil qilish.

3. Vizual vositalardan foydalanish: Xaritalar, diagrammalar, fotosuratlar va videolar kabi vizual materiallar o'quvchilarga ma'lumotni yaxshiroq tushunishga va muhokamalarda faol ishtirok etishga yordam beradi.

4. Mustaqil ishlarni qo'llab-quvvatlash: o'quvchilarga o'zlarini qiziqtirgan mavzularni mustaqil o'rganish, tadqiqot olib borish va natijalarni sinf bilan bo'lish imkoniyatini berish.

5. Teskari aloqa: o'quvchilarning ishini baholash, ularga fikr bildirish va darsda faol ishtirokini rag'batlantirish.

6. Qiziqarli va amaliy ahamiyatli vazifalarni yaratish: topshiriqlar qiziqarli, o'quvchilarni qiziqtiradigan va amaliy qo'llanilishi kerak. [1, 7]

O'qituvchilar amaliy geografiya darslarida o'quvchilarning faol ishtirokini ta'minlab, o'quv jarayonini o'quvchilar uchun qiziqarli, samarali va esda qolarli qilishlari mumkin. O'quvchilarning faol ishtiroki geografiya fanini muvaffaqiyatli o'rganishning muhim elementlari bo'lgan bilim qobiliyatlari, tanqidiy fikrlash va muloqot qobiliyatlarini rivojlantirishga yordam beradi.

Xulosa. Umumta'lim maktablarida geografiya fanidan amaliy mashg'ulotlar tashkil etilishi o'quvchilarning dunyo, uning tuzilishi va xususiyatlari haqidagi tasavvurlarini shakllantirishda muhim ahamiyat kasb etadi. O'qitishning turli uslublari, zamonaviy texnologiyalardan foydalanish va o'quvchilarni faol jalb etish orqali geografiya darslarini yanada qiziqarli, qulay va samarali o'tkazish mumkin. Amaliy mashg'ulotlar o'quvchilarning o'z ko'nikma va qobiliyatlarini rivojlantirish bilan birga, atrofdagi dunyoni yaxshiroq tushunishlariga yordam beradi.

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Mirzaakhmedova I.Z.
senior teacher
Department of Hospital Therapy and Endocrinology

THE ORIGIN OF CHRONIC LYMPHOCYTIC LEUKEMIA, ITS PREVENTION

Abstract. Ongoing lymphocytic leukemia (CLL) is a sort of most tumors that impacts the blood and bone marrow, portrayed through the uncommon increment and expansion of lymphocytes, a sort of white platelet. CLL is a sluggish developing most malignant growths that normally influences more established grown-ups, with most of cases recognized in people beyond sixty-five years old. Regardless of its steady blast rate, CLL can regardless thought process great estimated grimness and mortality whenever left untreated or on the other hand on the off chance that fix is deferred. In this article, we will give a total outline of CLL, its finding, and treatment choices, featuring the current day query and improvements in the field.

Keywords: CLL, impacts, diseases, results, various indications, blood system, chooses, treatments, diagnoses.

Introduction: Constant lymphocytic leukemia (CLL) or little lymphocytic lymphoma (SLL) is an inactive danger described by expanded creation of mature yet useless B lymphocytes. CLL/SLL is characterized as a monoclonal lymphoproliferative sickness portrayed by the expansion and gathering of morphologically experienced however immunologically useless B-cell lymphocytes that are smirch cells, as verified on fringe smear. The essential illness locales incorporate fringe blood, spleen, lymph hubs, and bone marrow. CLL and SLL are indistinguishable from a pathologic and immunophenotypic stance. Both CLL and SLL start from B-cell lymphocytes however present with various indications relying upon where the strange cells are found. Normally, the underlying leukemic stage addresses CLL, where the cells are available in the blood. This in the end advances to the lymphoma stage, addressing SLL, where the cells are tracked down in the lymph hubs. The term SLL is ordinarily used to address the lymphoproliferative interaction restricted to the lymph hubs.

Etiology

The specific etiology of CLL is obscure. Hereditary variables, instead of ecological elements, are the most probable reason for CLL. Nonetheless, barely any realized gamble factors for CLL incorporate word related causes by openness to specific synthetic compounds, radiation openness, and tobacco clients. Reports of ranchers working around elastic assembling businesses and laborers with openness to benzene and weighty dissolvable have shown an expanded gamble of CLL/SLL. In any case, these affiliations have not yet been demonstrated. In nuclear bomb survivors, no known expansion in the rate of CLL/SLL has been

noted. Notwithstanding, there has been an expanded gamble of different kinds of leukemia. The uranium digger populace, who endure openness to ionizing and non-ionizing radiation, has shown expanded CLL occurrence. Tobacco clients and cigarette smokers show an essentially raised hazard of CLL contrasted with non-tobacco clients. The Veterans Issues perceives CLL as having a relationship to openness to Napalm or different herbicides during military help.

Histopathology

The above all else research center anomaly found in CLL is lymphocytosis in fringe blood and bone marrow. The fringe blood smear shows leukemic cells, which are little, mature lymphocytes with a dimly stained core, dense chromatin, and undefined nucleoli with a restricted edge of basophilic cytoplasm. Old style «smirch» cells («bushel» cells) are likewise seen on fringe blood smear; these are pathognomy of CLL. The smear cells are more delicate than ordinary lymphocytes that are upset during the method involved with being spread on a glass slide.

The study of disease transmission and Chance Variables

CLL is the most regular sort of leukemia in grown-ups, representing around 25% of all leukemia cases. As per the American Disease Society, in 2022, there have been an expected 20,940 new cases of CLL perceived in the US, with a mortality charge of 4,510. The frequency of CLL will increment with age, with most of cases recognized in people beyond sixty-five years old Men are more noteworthy presumably to progress CLL than ladies, with a male-to-female proportion of 1.5: 1.

A few risk components have been perceived as adding to the improvement of CLL, comprehensive of family history, exposure to positive synthetic compounds, and hereditary transformations. People with a family record of CLL or different blood issues are at raised possibility of making the sickness. Openness to sure synthetic substances, like pesticides and solvents, has moreover been connected to an increased opportunity of CLL. Hereditary changes, like these influencing the TP53 quality, can also amplify a singular's intention to make CLL.

Pathophysiology

CLL is portrayed by utilizing the phenomenal increment and multiplication of lymphocytes, which are created in the bone marrow and stream into in the blood. In CLL, the lymphocytes are abnormal and do now not trademark as expected, primary to an aggregation of these cells in the blood, bone marrow, and lymphoid tissues. This collection can prompt a change of side effects, comprising of weakness, weight reduction, and normal diseases.

The standard lymphocytes in CLL are ordinarily B cells, which are a sort of lymphocyte that produces antibodies to battle disease. In CLL, the B cells are odd and do never again highlight appropriately, primary to a debilitated safe framework. The strange B cells can furthermore jam out conventional cells in the bone marrow, principal to iron deficiency, thrombocytopenia, and neutropenia.

Analysis

Finding of CLL regularly incorporates a combination of substantial assessment, clinical history, and research center tests. A substantial assessment could likewise unveil broadened lymph hubs, spleen, or liver, which can be characteristic of CLL. A clinical record may furthermore uncover signs like weakness, weight reduction, and ongoing diseases.

Research facility tests are basic for diagnosing CLL and may also include:

1. Complete Blood Count (CBC): A CBC estimates the unique components of blood, along with white platelets, ruby platelets, and platelets. In CLL, the CBC may likewise unveil a duplicated white blood cellphone count, with an over-the-top portion of lymphocytes.

2. Blood Smear: A blood smear incorporates dissecting an example of blood under a magnifying lens to appear for remarkable cells. In CLL, the blood smear may furthermore uncover peculiar lymphocytes.

3. Stream Cytometry: Stream cytometry is a research center investigate that dissects the characteristics of cells, alongside their size, shape, and floor markers. In CLL, skim cytometry may furthermore disclose strange lymphocytes with specific floor markers.

4. Bone Marrow Biopsy: A bone marrow biopsy incorporates disposing of an example of bone marrow tissue to investigate a magnifying instrument. In CLL, the bone marrow biopsy could likewise uncover a gathering of conventional lymphocytes.

Treatment Choices

Treatment for CLL regularly involves a total of chemotherapy, focused treatment, and immunotherapy. The reason for treatment is to deal with the blast of uncommon lymphocytes, lighten side effects, and upgrade lovely of life.

Conclusion

Ongoing lymphocytic leukemia is a muddled and heterogeneous problem that requires a total procedure to examination and treatment. While cure picks are accessible, the confusion stays serious, and query into new change and cures is continuous. By handle the study of disease transmission, pathophysiology, analysis, and cure picks for CLL, medical services specialists can concede extreme consideration for victims with this illness. Besides, persevered through query into the atomic instruments hidden CLL will prompt the improvement of new and extra phenomenal medicines, upgrading results for victims with this infection.

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Mizrabov U.B.
Jizzax Politexnika instituti assistenti
Dinakaran Sabapathy
Sambhram, B. tech fakulteti o'qituvchisi
Xaytbayev E.B.
Jizzax Politexnika instituti assistenti

JIZZAX SHAHRIDA SODIR BO'LGAN YO'L-TRANSPORT HODISALARI TAHLILI

Annotatsiya. Ushbu maqolada Jizzax shahri hududida sodir bo'lgan yo'l transport hodisalari tahlili va ularni kamaytirish bo'yicha chora tadbirlar haqida xulosalar bayon qilingan.

Kalit so'zlar: Yo'l transport hosisasi, miqdoriy usul, topografik usul, sifat, absolut ko'rsatgich, nisbiy halokatlilik ko'rsatgichi, solishtirma halokatlilik ko'rsatgichi.

Mizrabov U.B.
assistant
Jizzakh Polytechnic Institute
Dinakaran Sabapathy
Sambhram
lecturer
B. tech
Khaitbayev E.B.
assistant
Jizzakh Polytechnic Institute

ANALYSIS OF ROAD-TRANSPORT ACCIDENTS THAT HAPPENED IN THE CITY OF JIZZAH

Abstract. This article presents conclusions about the analysis of road traffic accidents that occurred in the territory of the city of Jizzakh and measures to reduce them.

Key words: Road transport characteristics, quantitative method, topographic method, quality, absolute index, relative fatality index, relative fatality index.

Harakat xavfsizligini tashkil etish uchun aniq tadbirlar belgilashda asosiy tayanch ko'rsatma sifatida yo'l transport hodisalarini har taraflama chuqur ob'ektiv tahlil qilish natijalaridan olingan xulosalardan foydalaniladi.

Yo'l transport hodisalari quyidagi vazifalarni hal qilish maqsadida tahlil qildik:

- Jizzax shahrida harakat xavfsizligiga taalluqli «Avtomobil-haydovchi-yo‘l-piyoda-muhit» tizimiga kiruvchi har bir faktorning faoliyatiga tegishli tadbir va choralar ishlab chiqish uchun;

- Shaxardagi biron-bir boshqaruv territoriyasidagi, vazirliklardagi va ularning korxonalaridagi falokatlar ahvolini, o‘zgarish mohiyatini hamda istiqboldagi o‘zgarishini bashorat qilish maqsadida;

- Yo‘l transport hodisalarining kelib chiqish sabablarini va ularni bartaraf qilish borasida tuziladigan ko‘rsatmalarni ishlab chiqish uchun;

- Yo‘l transport hodisalari ko‘p qaytariladigan yo‘l bo‘laklarini aniqlash maqsadida;

- Shahardagi bitta yoki bir nechta bir xil yo‘l transport hodisalarining vujudga kelish sabablarini aniqlash uchun;

- Yo‘l transport hodisalarini tahlil qilish uchun universal dastur tuzish maqsadida.

Maqsad va vazifalariga qarab yo‘l transport hodisalarini tahlil qilishning *miqdoriy*, *sifat* va *topografik* usullari mavjud. Yo‘l transport hodisalarini miqdoriy usul bilan tahlil qilishda halokatlarning absolyut, nisbiy va solishtirma ko‘rsatkichlari o‘rganildi.

Halokatlarning absolyut ko‘rsatkichlariga quyidagilar misol bo‘ladi: Yo‘l transport hodisalarining umumiy (yillik, oylik, choraklik) soni; yo‘l transport hodisalarida jarohat olganlar (o‘lganlar) soni; jarohat olganlarning yoki o‘lganlarning yoshiga, kasbiga qarab yo‘l transport hodisalaridagi soni; haydovchilarning aybi bilan o‘lganlar, jarohat olganlar soni; avtomobil yoki ular holatining nosozligi bilan bo‘lgan yo‘l transport hodisalari soni va h.k.

Solishtirma halokatlilik ko‘rsatkichi. Yo‘l transport hodisalar biron-bir absolyut ko‘rsatkichidan boshqa yo‘l transport hodisalar qancha qismini tashkil qilishi tushuniladi va odatda foiz ko‘rsatkichida keltirildi. Masalan, jami yo‘l transport hodisalar sonidan to‘ntarilish (to‘qnashish, piyodalarni bosib ketish yoki yo‘l transport hodisalar halok bo‘lgan bo‘lganlar, jarohat ko‘rganlar va h.k.) necha foizni tashkil qiladi.

Nisbiy halokatlilik ko‘rsatkichlari. Nisbiy halokatlilik ko‘rsatkichlarini hisoblashda bitta absolyut ko‘rsatkich boshqa absolyut ko‘rsatkichga nisbatan olindi.

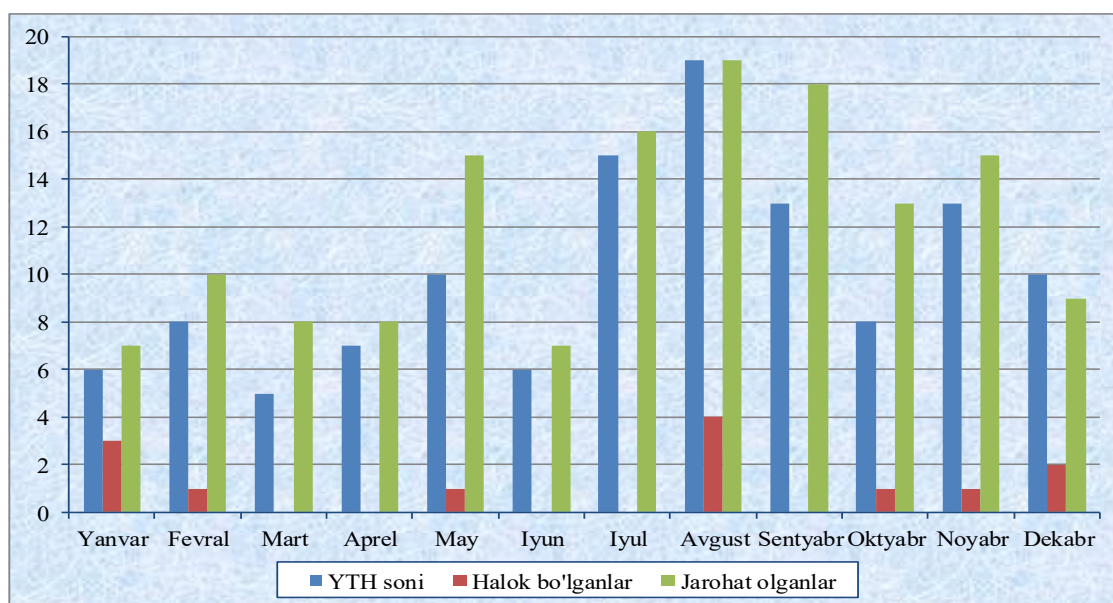
Yo‘l transport hodisalarini oylar bo‘yicha tahlili quyidagi jadvalda keltirilgan.

1-jadval

YTH	Oylar											
	Yan	Fev	Mart	Apr	May	Iyun	Iyul	Avg	Sen	Okt	Noy	Dek
Umumiy soni	6	8	5	7	10	6	15	19	13	8	13	10
	3	1	0	0	1	0	0	4	0	1	1	2
Jarohat olganlar	7	10	8	8	15	7	16	19	18	13	15	9

Yo‘l transport hodisalarini turlari bo‘yicha taxlili, Bunyodkor ko‘chasida sodir etilgan yo‘l transport hodisalarining 48% ni piyodalarni bosish, 40 % ni to‘qnashuv va qolgan 12 % ni boshqa turdagi hodisalar tashkil etganligi ko‘rsatib turibdi.

(1-rasm)

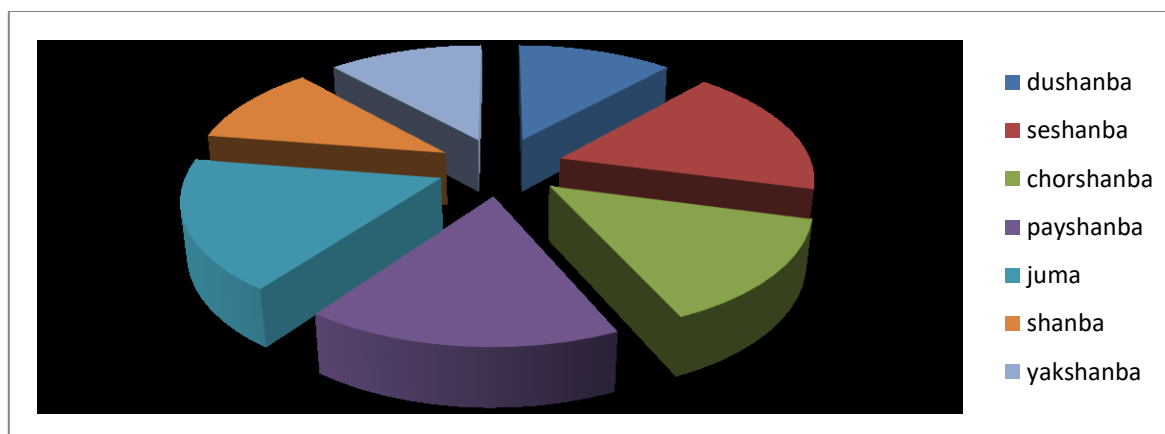


1-rasm. YTH larni oylar bo‘yicha tahlili gistogrammasi

Tahlil natijasi iyul, avgust va sentyabr hamda noyabr oylarida yo‘l transport hodisalar soni keskin ko‘payganligi va ularning oqibatida halok bo‘lganlar va jarohat olganlarning sonini ham oshganligini ko‘ramiz. Bu yerda may va dekabr oylari ko‘rsatkichlari ham yuqoriligini ta’kidlash kerak bo‘ladi.

Yo‘l transport hodisalarini hafta kunlari bo‘yicha taxlilini quyidagi jadvalda ko‘rish mumkin.

YTH	Hafta kunlar						
	Dush	Sesh	CHor	Pay	Juma	Shan	Yak
Umumiy soni	14	21	17	20	21	13	14
Halok bo'lganlar	0	2	3	2	1	0	0
Jarohat olganlar	10	7	9	11	15	17	9



2-rasm. Hafta kunlari bo'yicha YTH lari taqsimlanish siklogrammasi.

Xulosa o'rnida shuni aytish mumkinki:

- Hafta kunlari bo'yicha YTH larining taqsimlanishi juma va seshaba kunlari eng ko'p ko'rsatkich (17.5% ni tashkil etgan, shanba yakshanba va dushanba kunlari ko'rsatkich kam bo'lgani bilan 12% dan yuqori bo'lib qolmoqda) va o'sha kunlari eng ko'p YTH lari kuzatilmoqda.

- YTH lari oqibatida juma(4 ta) va chorshanba(3 ta) kunlari xalok bo'lganlar soni 7 kishini tashkil qiladi.

- YTH lari oqibatida tan jaroxati olganlar seshanba(23 ta) va juma(25 ta) kunlari 48 tani, umumiy hafta hisobida 146 kishini tashkil etadi.

- YTH larni sodir bo'lishida piyodalarning ulushi sezilarli ko'p bo'lganligini e'tiborga olgan holda ularni kamaytirish va YTH larni oldini olish uchun taxlillar hamda yo'l sharoitini o'rganib chiqish va yana piyodalar harakati tavsiflaridan kelib chiqqan holda bajarilishi kerak bo'lgan tadbirlarni belgilab olish va ularni amalga oshirish kerak bo'ladi.

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*Mo'minjonov N.N.
Namangan Muhandislik Qurilish instituti stajyor-o'qituvchisi
Maxamadlatifov A.
Ashurova L.
Mahamadaminov A.
Namangan Muhandislik Qurilish instituti talabasi*

MEHNAT XAVFSIZLIGINING PSIXOLOGIK ASOSI

Annotasiya. Ushbu maqolada Mehnatni muhofaza qilish fanining asosiy maqsadi talabalarga insonning ishlab chiqarishdagi mehnat faoliyati davrida yuzaga keladigan xavfli faktorlar, ularning kelib chiqish sabablari va bartaraf etish yo'llari, mehnat xavfsizligini ta'minlash hamda xavfsiz va sog'lom ish sharoitlarini yaratish bo'yicha nazariy bilim berish va amaliy ko'nikmalar hosil qilishdan iboratdir.

Kalit so'zlar: jarohatlanishlar, shikastlanishlar, kasallanishlar, yong'inlar, ishlab chiqarishdagi avariyaalar, xavfsizlik texnikasi, ruhiy jarayonlar, ruhiy xususiyatlar, ruhiy holat, mehnat psixologiyasi, mehnat faoliyati samaradorligi, paroksizmal holat, sanitar-gigiyenik sabablar.

*Mominjanov N.N.
trainee-teacher
Namangan Engineering and Construction Institute
Makhamadlatifov A.
Ashurova L.
Mahamadaminov A.
student
Namangan Engineering and Construction Institute*

PSYCHOLOGICAL BASIS OF LABOR SECURITY

Abstract. In this article, the main goal of the science of labor protection is to provide students with the theoretical knowledge of dangerous factors that arise during human labor activity in production, their causes and methods of elimination, ensuring labor safety and creating safe and healthy working conditions. is to give and create practical skills.

Key words: injuries, injuries, illnesses, fires, industrial accidents, safety techniques, mental processes, mental characteristics, mental state, work psychology, labor efficiency, paroxysmal condition, sanitary-hygienic reasons.

Zamonaviy ishlab chiqarish sharoitida baxtsiz hodisalarni (jarohatlanishlar, shikastlanishlar, kasallanishlar, yong'inlar va b.) kamaytirish muammosini

faqatgina muhandislik uslublari orqali hal etib bo'lmaydi. Shu sababli, mehnat xavfsizligi psixologiyasi faoliyat xavfsizligini ta'minlashda muhim o'rin tutadi.

Tajribalarning ko'rsatishicha ishlab chiqarishdagi avariya va jarohatlanishlarning ko'pchiligi mashinalardagi muhandislik-konstruktorlik nuqsonlar yoki texnik- texnologik sabablar orqali emas, balki tashkiliy-psixologik, ya'ni xavfsizlik texnikasi bo'yicha yetarli bilimga ega bo'lmashlik, yetarli darajada o'qitilmashlik, ishchining bilib- bilmay xavfsizlik qoidalariga rioya qilmasligi, xavfli ishlarga maxsus o'qishlardan o'tmaganlarga ruxsat berish, ishga mutaxassislik bo'yicha qabul qilmaslik va shu kabi qator sabablar ta'sirida yuz beradi. Shu sababli, ko'pincha jarohatlanishlarning 60–70 foiziga bevosita jarohatlanuvchi- larning o'zlari aybdor bo'ladi. Xavfsizlik psixologiyasi deganda insonning mehnat xavf- sizligini ta'minlashga qaratilgan psixologik bilimlardan foydalanish tushuniladi[1].

Xavfsizlik psixologiyasi mehnat faoliyati davomida yuz beradigan turli jarayonlarni, xususiyatlarni va holatlarni chuqur o'rganadi hamda tahlil qiladi. Shunga bog'liq holda, insonning ruhiy faoliyatini uch xil komponentga ajratish mumkin, ya'ni ruhiy jarayonlar, xususiyatlar va holatlar.

Ruhiy jarayonlar – ruhiy faoliyatning asosini tashkil etadi. Ruhii jarayonlar bilish, emotsional va irodaviy sezish (his qilish, idrok etish, xotirlash va b.) kabi turlarga bo'linadi.

Ruhiy xususiyatlar (shaxsiy fazilatlar). Ruhii xususiyatlarga insonning xarakteri, dunyoqarashi, fikrlash qobiliyati, shaxsiy fazilatlariga esa intellektual, emotsional, axloqiy va mehnat qobiliyati hamda irodasi kiradi. Xususiyatlar turg'un va doimiy hisoblanadi.

Ruhiy holat – ruhiy jarayonlarga ijobiy yoki salbiy ta'sir etuvchi ruhiy faoliyat xususiyatini bildiradi.

Mehnat psixologiyasi vazifalari hamda mehnat xavfsizligi psixologiyasi muammolaridan kelib chiqqan holda, ruhiy holatni: ishlab chiqarish ruhiy holati va maxsus ruhiy holatlarga ajratish mumkin. Maxsus ruhiy holat ishlab chiqarish jarohatlari, shikastlanishlar va shu kabi ko'ngilsiz oqibatlar bo'yicha profilaktik tadbirlarni tashkillashtirishda yuzaga kelishi mumkin[2].

Insonning mehnat faoliyati samaradorligi (ish qobiliyati) ruhiy zo'riqish, ya'ni hayajonlanish darajasiga bog'liq holda o'zgaradi. Ruhii zo'riqish ma'lum chegaragacha ish natijasiga ijobiy ta'sir ko'rsatadi. Lekin bu xususiyatni chegaradan, ya'ni kritik darajadan ortiq bo'lishi ish qobiliyatini pasayishidan tortib umuman yo'qolishigacha olib kelishi mumkin. Bunday ruhiy zo'riqish, chegaradan tashqari zo'riqish deb belgilanadi. Ishchining mehnat faoliyat davridagi me'yoriy ruhiy yuklanganligi maksimal yuklanish darajasining 40–60 foizini tashkil etishi lozim, aks holda, yuklan- ganlikning bu chegaradan oshishi ishchining ish qobiliyatini susayishiga olib keladi. Chegaradan tashqari ruhiy zo'riqish tormozli va asabiy ko'rinishlarga bo'linadi. Tormozli ruhiy zo'riqish harakatning cheklanganligi va sekinlashishi orqali tavsiflanadi.

Asabiy zo'riqish, hayajonlanish, ruhiy zo'riqish giperaktivligi, ko'p so'zlilik, qo'l va ovoz qaltirashi kabi belgilarda namoyon bo'ladi. Bunday holatda ishchi dag'al, xafaqon ko'rinishga tushishi, tez-tez beixtiyor ish jihozlari va asboblari holatini kuzatishi, ust-kiyimini to'g'rilashi, qo'lini artishi va shu kabi qiliqlarni bajarishi kuzatiladi. Albatta, bu holatlarning barchasi xatoga yo'l qo'yilishiga va natijada baxtsiz hodisalarni kelib chiqishiga sabab bo'ladi[3].

Ishchining ruhiy ishonchliligini belgilovchi alohida ruhiy holatlar: paroksizmal hushdan ketish, kayfiyatni psixogen o'zgarishi, ruhiy aktiv vositalarni (stimulatorlar, trankvilizatorlar, alkogol ichimliklar) qabul qilish ta'siridagi ruhiy o'zgarishlar ko'rinishlarida bo'ladi.

Paroksizmal holat – turli xil toifadagi hushdan ketish (bosh miyaning organik kasallanishi, epilepsiya, hushdan ketish), ya'ni bir necha sekunddan bir necha daqiqa oralig'ida hushni yo'qotishdir. Albatta, bunday holat turli xil og'ir oqibatlariga olib keluvchi, ba'zida o'lim bilan tugovchi baxtsiz hodisalarga sabab bo'lishi mumkin.

Psixogen o'zgarishlar va «affektiv» (affekt-hissiy portlash, emotsional portlash) holatlar ruhiy ta'sir orqali yuzaga keladi. Kayfiyatning tushishi va apatiya bir necha soatdan bir necha oygacha davom etishi mumkin. Albatta, bunga turli xil ko'ngilsiz hodisalar, ixtilofli, mojaroli vaziyatlar sabab bo'ladi. Bunday holatda befarqlik, lanjlik, lohaslik, tormozlanganlik, e'tiborsizlik, muskul harakatining susayishi sodir bo'lishi yuzaga keladi va bu holatlar o'z-o'zini nazorat qilish qobiliyatini susayishiga, natija esa turli ko'rinishdagi baxtsiz hodisalarni kelib chiqishiga olib kelishi mumkin[4].

Ruhiy faoliyatni maishiy va ishlab chiqarish omillari ta'sirida o'zgarishi ishlab chiqarish faoliyatidagi muhandis-tashkilotchilar oldiga ishchining ruhiy holatini nazorat qiluvchi tizimni vujudga keltirish hamda takomillashtirish zarurligini ko'rsatadi. Ishlab chiqarishda kasb kasalliklarining oldini olish va ishlab chiqarish jarohatlarini kamaytirishda, ushbu baxtsiz hodisalarni chuqur tahlil qilish asosida ularni keltirib chiqaruvchi sabablarni hamda ishlab chiqarishdagi xavfli va zararli omillarni puxta o'rganish muhim rol o'ynaydi.

Baxtsiz hodisalarning sabablari asosan quyidagi 4 guruhga bo'linadi: texnikaviy, sanitar-gigiyenik, tashkiliy va psixofiziologik.

Texnikaviy sabablarga mashina va mexanizmlar hamda ish jihozlarining nosozligi, elektr qurilmalarining yerga ulanmaganligi, yuklashtirish mashinalaridan noto'g'ri foydalanish, mashina va mexanizmlar konstruktsiyasini mehnat muhofazasi talablariga javob bermasligi kabilar kiradi.

Sanitar-gigiyenik sabablarga esa mehnat gigiyenasi, sanitar me'yorlar va qoidalarga amal qilmaslik, yoritilganlik, harorat, nisbiy namlik, havoning harakatlanish tezligi, havoning bosimi kabi ko'rsatkichlarni me'yordan chetga chiqishi, yuqori miqdordagi shovqin, titrash, havoning changlanganligi yoki gazlanganligini kiritish mumkin.

Psixofiziologik sabablarga bajarilayotgan ishga e'tiborsiz qaralishi, ishchining o'z faoliyatida bo'lgan nazoratining bo'shligi, jismoniy yoki asabiy toliqish va boshqa shu kabilar kiradi.

Ishlab chiqarishdagi xafli va zararli omillar ishning turi va mehnat sharoitiga bog'liq holda 4 guruhga bo'linadi: fizikaviy, kimyoviy, biologik va psixofiziologik.

Fizikaviy omillarga harakatdagi mashina va mexanizmlar, ularning himoyalanmagan qo'zg'aluvchi mexanizmlari, ish joyi havosining yuqori darajada changlanganligi, gazlanganligi, baland darajadagi shovqin, titrash, infratovush, ultratovush, turli xil nurlanishlar, statik elektr zaryadlari, yuqori kuchlanishdagi elektr yoki magnit maydonlari, yoritilganlik darajasining me'yordan chetga chiqishi kabi omillar kiradi.

Kimyoviy omillarga ishlab chiqarish jarayonlarida ishlatiladigan yoki ajralib chiqadigan turli xil kimyoviy moddalar kiradi. Ularni insonga ta'sir etish xususiyatiga qarab quyidagi guruhlarga ajratish mumkin: umumiy zaharlovchi, ko'payish funksiyalariga ta'sir etuvchi; inson a'zolariga kirish yo'li orqali esa: nafas olish yo'li orqali ta'sir etuvchi, ovqatlanish va hazm qilish tizimi orqali va bevosita teri orqali ta'sir etuvchi. Biologik omillarga esa har xil jarohatlar va kasalliklarni keltirib chiqaruvchi mikro va makro- organizmlar: bakteriyalar, virus-lar, rikket, zamburug'lar, har xil zaharli o'simliklar va hayvonlar kiradi.

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WAYS OF THE DEVELOPMENT OF THE COGNITIVE PROCESS OF PRESCHOOL CHILDREN AND THE IMPLEMENTATION OF INTELLECTUAL COGNITIVE SKILLS

Annotation. In this article we can learn about the development of cognitive processes in preschoolers and what to pay more attention to in this development.

Key words: cognition, mental, cognitive, mental, intellectual, intuition, perception, attention, memory, imagination, thinking, speech, imagination, emotion, will, etc.

Cognition – the process of psychic reflection, provides for the acquisition and assimilation of knowledge, interest in knowledge - the product of mental intellectual sensations, which is manifested as a person's need to know the tevarak-the surrounding world. In preschool children, the development of intuition, perception, attention, memory, imagination, thinking, speech, fantasy, emotion and will is accelerated. The child cannot yet distinguish colors well from each other. It is advisable to give him toys, colored clothes, colored folk, boxes and similar toys that will help him know the difference in colors. Although preschool children are based on their conspicuous signs (color and shape) in the perception of various things, but cannot analyze in depth. Children of preschool age will have the ability to analytically perceive pictures with the help of adults. When children perceive pictures, adults should be taught to analyze them with different questions. In this, basically, children's attention:

1. To correctly perceive the content (plot) of the photo;
2. To correctly perceive the place of each described thing in the general view of the photo;
3. It is necessary to focus on the correct perception of the relationship between the described things.

Attention is a constant companion of any of our activities. Therefore, the importance of attention in a person's life is greater than benihoya. The attention of preschool children will be largely involuntary. The game is of great importance for the growth of voluntary attention in preschool children. During the game, children gather their attention in one place and, on their own initiative, advance certain goals.

The memory of a child at this age will go to improvement on the basis of new activities and new requirements that the child sets for himself. The memory of preschool children is characterized by being visual, figurative. The child is more dominated by involuntary memorization and involuntary recall. The child

will repeat the words without any meaning. But later, under the influence of adults, voluntary memorization also gradually begins to develop.

A three-year-old child is able to keep his impressions remembered for several months. Memory growth is facilitated by games, various activities, memorizing poetry, telling fairy tales and stories, and conducting observation work during walks. Children of this age can easily remember both new words and even words in foreign languages. But, although children easily remember the material, they do not understand the meaning of many well and find it difficult to use them in speech. The task of adults is not only to make children remember as many words and visions as possible, but to achieve the acquisition of various knowledge that is understandable, useful to them. Children use this kind of knowledge in their games, paintings, conversations with teachers or adults, knowledge that serves for their mental and moral growth.

The thinking of preschool children and its development has its own peculiarity. Thinking begins to develop very quickly during the preschool age of the child. The birth of questions about each area in preschool children testifies to the fact that their thinking is being activated. When a child cannot find an answer to his question or adults do not pay attention to his question, the curiosity in it begins to fade.

Usually, any thought process arises due to surprise, surprise from something and, as a result, the birth of various questions. Many parents and some caregivers, if the children ask more questions, «don't be too mahmudana» and «Where Did you learn such things», become rich. As a result, the child will kiss and try to understand as much as he knows. Some reluctant children do not ask any questions. Such children should also be asked questions by the adults themselves in various activities and trips, thereby activating them.

Any thinking usually begins with comparing, analyzing and synthesizing something. That is why we call this comparison, analysis and synthesis a contemplative process. Trips help to activate and develop the thought process in children. Children compare different things with each other on trips to nature, strive for analysis and synthesis.

Since adults are engaged in the cultivation of children's speech, they should not forget that children of preschool age in some cases cannot fully perceive their own speech qualities. In addition, the ability to distinguish complex speech sounds in children from each other is also a buladi, which has not yet been fully improved. One of the most important conditions for correcting language fluency is to speak fluent language, fully and correctly pronouncing it with a child. Therefore, it is advisable if the above mentioned recommendations are followed in the development of cognitive processes of preschool children.

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XOTIN-QIZLARNING TADBIRKORLIK VA BIZNES FAOLIYATIGA KENG JALB QILISHNING XUQUQIY ASOSLARI VA ZAMONAVIY TENDETSIYALARI

Annotasiya. Maqolada Yangi O'zbekistonda xotin-qizlarga munosabat masalasidagi davlat siyosati doirasida amalga oshirilayotgan yangi tizimli islohotlar va ularning normativ-huquqiy asoslari, xotin-qizlarning huquqlari, erkinliklari hamda qonuniy manfaatlarining himoya qilishda, bugungi kunda ayollar ijtimoiy faolligini oshirish, ularning oila va jamiyatdagi mavqeini yuksaltirishda huquqiy savodxonlikni hamda kichik biznes va xususiy tadbirkorlikni rivojlantirishda ayollarning ahamiyatini oshirish masalalariga e'tibor berilgan.

Maqola tadqiqotining ob'ekti xotin-qizlarning iqtisodiy mustaqilligini ta'minlash, huquq va qonuniy manfaatlarini himoya qilish, kasbga o'qitish va bandligini sifat jihatidan ta'minlash, ularni tadbirkorlik va biznesga keng jalb etish hamda ijtimoiy himoyaga muhtoj xotin-qizlarning huquqlari va qonuniy manfaatlarini ta'minlash bog'liq ijtimoiy-huquqiy munosabatlar tizimi hisoblanadi. Tadqiqotning predmeti xotin-qizlarning tadbirkorlik faoliyatini tartibga soluvchi normativ-huquqiy hujjatlar, ilmiy-nazariy qarashlardan iboratdir. Tadqiqot olib borishda tarixiy, qiyosiy-huquqiy, mantiqiy, ilmiy usullaridan foydalanilgan.

Muallif tomonidan ayollarning huquq va qonuniy manfaatlarini himoya qilish, ularga davlat va jamiyat taqdiriga daxldor qarorlarni hayotga tatbiq etish, xususan, qonunlarni ishlab chiqish, qabul qilish, islohotlarni amalga oshirish jarayonlarida bevosita qatnashishlari muammolariga qonun doirasida adolatli echim topish maqsadida sud-huquq sohasidagi islohotlar ham tahlil etilgan.

Kalit so'zlar: xotin-qizlar, huquq, erkinlik, tadbirkorlik, ilm-fan, innovasiya.

*Mukhitdinova F.A., doctor of legal sciences
professor*

LEGAL FOUNDATIONS OF HUMAN-INTEREST ENTREPRENEURSHIP

Abstract. The article focuses on the new reforms carried out in the framework of the state policy on the issue of treatment of women in New Uzbekistan and their legal framework, protection of women's rights, freedoms and

legitimate interests, increasing the social activity of women today, increasing their position in the family and society and the issues of increasing the role of women's labor in the development of small business and private entrepreneurship, the role of women entrepreneurs in the modern world, support for women's entrepreneurship and the creation of a business environment.

The object of research of the article is ensuring the economic independence of women, protecting their rights and legitimate interests, ensuring high-quality professional training and employment, and broadly involving them in business activities and the system of social and legal relations related to ensuring the rights and legitimate interests of women in need of social protection. The subject of the research is normative legal documents regulating women's entrepreneurial activity, scientific and theoretical views. The study used historical, comparative-legal, logical, scientific methods. Reforms in the judicial sphere were also analyzed by the author in order to protect the rights and legitimate interests of women, to find a fair solution to their problems within the framework of the law.

Keywords: women, law, freedom, entrepreneurship, science, innovation.

Kirish

So‘nggi yillarda mamlakatimizda xotin-qizlar masalalari va ularni har tomonlama qo‘llab-quvvatlash davlat siyosati darajasiga ko‘tarilib, ushbu masala Yangi O‘zbekiston taraqqiyot strategiyasining muhim yo‘nalishlaridan biriga aylandi. Bu borada xotin-qizlarning- davlat va jamiyat boshqaruvidagi o‘rnini, ijtimoiy-iqtisodiy faoligini oshirishga, kasb-hunarga o‘qitish va bandligini ta‘minlashga, tadbirkorlik faoliyatini qo‘llab-quvvatlashga, ta‘lim olishlari va ilmiy faoliyat bilan shug‘ullanishlari uchun zarur shart-sharoit yaratilishiga, turmush sharoitlarini yaxshilashga va eng asosiysi, huquq va erkinlarini har tomonlama himoya qilishga qaratilgan tizimli ishlar amalga oshirildi va aniq natijalarga erishildi.

Shu bilan birga, xotin-qizlarni bandligini ta‘minlash, ularni tadbirkorlikka keng jalb qilish va zamonaviy kasblarni o‘rgatish bilan bog‘liq masalalar sohada dolzarb yo‘nalish va asosiy vazifalardan biri hisoblanadi. Xususan, mazkur masala O‘zbekiston Respublikasi Prezidentining 2021 yil 3 dekabrda PF–29-son «Mahallada tadbirkorlikni rivojlantirish, aholi bandligini ta‘minlash va kambag‘allikni qisqartirish bo‘yicha davlat siyosatining ustuvor yo‘nalishlari to‘g‘risida», 2022 yil 2 martdagi PF–81-son «Oila va xotin-qizlar bilan ishlash, mahalla va nuroniylarni qo‘llab-quvvatlash tizimini takomillashtirish chora-tadbirlari to‘g‘risida», 2022 yil 7 martdagi PF–87-son «Oila va xotin-qizlarni tizimli qo‘llab-quvvatlashga doir ishlarni yanada jadallashtirish chora-tadbirlari to‘g‘risida», 2021 yil 5 martdagi PQ–5020-son «Xotin-qizlarni qo‘llab-quvvatlash, ularning jamiyat hayotidagi faol ishtirokini ta‘minlash tizimini yanada takomillashtirish chora-tadbirlari to‘g‘risida»gi hamda O‘zbekiston Respublikasi Prezidentining «Oilalarni mustahkamlash va xotin-qizlarni faolligini oshirish bo‘yicha qo‘shimcha chora-tadbirlar to‘g‘risida»gi 2023 yil 21

dekabrdagi PQ-401 sonli Qarorida ham o‘z aksini topgan bo‘lib, xotin-qizlarning ijtimoiy-siyosiy faolligini hamda bandligini oshirish, tadbirkorlik ko‘nikmalarini shakllantirish, borasida amalga oshirilishi lozim bo‘lgan ustuvor yo‘nalishlar belgilab berilgan.

Shuningdek, mavzning dolzarbligi O‘zbekiston Prezidenti Sh. Mirziyoyev tomonidan qo‘rsatilib, mamlakatimizda ayollar tadbirkorligini yangi bosqichga ko‘tarish, ularning bandligiga ko‘maklashish maqsadida, 2023 yil mart oyida Senat Raisi boshchiligida maxsus komissiya tashkil etilib, har bir hududda, xotin-qizlarni kasb-hunarga o‘qitish, bandligini ta‘minlash va tadbirkorlikka jalb etish bo‘yicha ishlarni mutlaqo yangicha yondashuvlar va tizim asosida tashkil qilish masalasi ustuvor qilib belgilandi.

Material va metodlar

Maqola tadqiqotining ob'ekti ijtimoiy himoyaga muhtoj xotin-qizlarning huquqlari va qonuniy manfaatlarini ta‘minlash bilan bog‘liq ijtimoiy-huquqiy munosabatlar tizimi hisoblanadi.

Tadqiqotning predmeti xotin-qizlarning tadbirkorlik faoliyatini tartibga soluvchi normativ-huquqiy hujjatlar, ilmiy-nazariy qarashlardan iboratdir.

Tadqiqot olib borishda tarixiy, qiyosiy-huquqiy, mantiqiy, ilmiy usullaridan foydalanilgan.

Maqolada ko‘tarilgan muammo huquqshunos olimlardan G‘.A. Abdumajidov, I.R. Astanov, D.B. Bazarova, B.X. Pulatov, S.M. Rahmonovalarning ilmiy ishlarida qisman tahlil etilgan. Fuqaroviy-tadbirkorlik bilan bog‘liq masalalar esa, Z. Esanova, D. Karaxodjaeva, N. Imomov kabi olimlarning ilmiy ishlarida uchraydi.

Biroq yuqoridagi tadqiqotchilarning ilmiy ishlarida xotin-qizlarni tadbirkorlikka jalb qilish orqali ularning bandligini ta‘minlash bilan bog‘liq metodologik va xuquqiy jihatlar kompleks tahlil etilmagan.

Tadqiqot natijalari

Munozara

So‘nggi yillarda O‘zbekiston Prezidenti Sh. Mirziyoyev boshchiligida barcha sohalarda, xususan, milliy iqtisodiyotning ochiqligini ta‘minlash va uning jahon iqtisodiyotiga integratsiyasi uchun barcha zarur shart-sharoitlarni yaratish, investitsiyaviy jozibadorlikni mustahkamlash, kichik va o‘rta biznesni xalqaro standartlar asosida takomillashtirish borasida keng ko‘lamli islohotlar amalga oshirilib kelinmoqda.

Milliy iqtisodiyotimizni barqaror rivojlanishida barcha dolzarb vazifalar singari xotin-qizlar masalasiga alohida e‘tibor qaratilmoqda.

Xalqaro Mehnat tashkiloti tomonidan 2022 yilda e‘lon qilingan tadqiqot natijalariga ko‘ra «ayollar mehnat faoliyati davomida hali ham munosib ish uchun jiddiy to‘siqlarga duch kelishmoqda [1]. Bugungi kunda xotin-qizlarni tadbirkorlikka keng jalb qilish va ularni bandligi ta‘minlash masalalar, xususan sohaning institutsional va xuquqiy asoslarini takomillashtirish dolzarb muammolardan biri sifatida yuzaga chiqmoqda.

Mazkur masalaga jahon xamjamiyatida alohida e'tibor qaratilib, aynan xotin-qizlarni keng tadbirkorlikka jalb qilish orqali davlat va jamiyatning rivojlanishiga asosiy sabablardan biri bo'lib xizmat qilishi ta'kidlanadi. Xususan, Xalqaro mehnat tashkilotining ma'lumotlariga ko'ra, bugungi kunda dunyo aholisining 50%ga yaqinini ayollar tashkil etib, ularning jahon yalpi ichki mahsuloti ulushidagi hissasi 40%ni tashkil etmoqda [2].

Jahon bankining prognozlariga ko'ra, bandlik sohasida gender tafovut bartaraf etilsa, uzoq istiqbolda mamlakatlarda axoli jon boshiga o'rtacha jahon yalpi ichki mahsulotini 20%ga oshirish mumkin bo'ladi hamda agar ayollar o'z bizneslarini erkaklar bilan bir hil sur'atlarda boshlasa va kengaytirsa, bu jahon iqtisodiyotiga qo'shimcha 6 trillion dollargacha qo'shilishi mumkin [3].

Mastercard kompaniyasi tomonidan 2017 yilda birinchi marotaba «tadbirkor ayollar indeksi» (Index of Women Entrepreneurs) ishlab chiqildi. Kompaniya tomonidan o'tkazilgan tadqiqotlar shuni ko'rsatdiki, ayollar asosan o'z bizneslarini ehtiyojdan kelib chiqib, iroda kuchi bilan rivojlantiradilar. Ayollarning o'z biznesini boshlashiga to'sqinlik qiladigan ikkita asosiy to'siq, ya'ni cheklangan madaniy an'analar va kasbiy o'sish uchun imkoniyatlarning yetishmasligi keltirilgan. Moliyaviy xizmatlardan foydalanish va tijorat faoliyatini rivojlantirishni qo'llab-quvvatlovchi qulay muhitni yaratish xotin-qizlarning tadbirkorlik va biznes faoliyatini rivojlantirishga xizmat qiladi [4].

Bu borada xalqaro tashkilotlar, xususan BMT xam muhim rol o'ynamoqda. BMT Bosh Assambleyaning organi - savdo va taraqqiyot bo'yicha konferensiyasi (UNSTAD) ayollar biznesini rivojlantirishda muhim rol o'ynaydi. Ayollarning tadbirkorlik faolligini oshirish maqsadida UNSTAD qator mamlakatlarda xalqaro ta'lim dasturini amalga oshirib, uning loirasida xotin-qizlarning xalqaro tadbirkor bo'yicha malakasini oshirilmoqda [5].

Bunday faollik bilan ayollar milliy va jahon iqtisodiyotini rivojlanishiga ham munosib hissa qo'shishi va ayollarimizni xalqaro darajada qo'llab-quvvatlanishi ular uchun barcha imkoniyatlarni yaratish, xususan, xuquqiy asoslarni takomillashtirish oldimizda turgan dolzarb vazifalardan biri hisoblanadi.

Tadqiqot natijalari tahlili

Bu borada keyingi yillarda mamlakatimizda qator aniq natijalarga erishildi.

Birinchidan, xotin-qizlarni xar tomonlama qo'llab-quvvatlash va gender tenglikni ta'minlash sohasida xalqaro standartlar asosida milliy qonunchilikni takomillashtirishga alohida e'tibor qaratildi. So'ngi yillarda sohaga oid 40 dan ortiq qonunchilik hujjatlari va muhim konseptual xujjatlar qabul qilindi.

Mazkur xujjatlar doirasida xotin-qizlar va erkaklar uchun teng huquq hamda imkoniyatlar, ayollarning davlat va jamiyat boshqaruvidagi o'rning mustahkamlanishi, ularning ta'lim olishlari uchun qulay sharoitlar yaratilishi, bandligini ta'minlash va kasb-hunarga o'qitish hamda ayollarning iqtisodiy hayotdagi faolligini oshirish borasida muhim tadbirlar amalga oshirilmoqda.

Qolaversa, xotin-qizlarni har tamonlama huquq va erkinlarini himoya qilish borasida mamlakatimizda aniq va manzilli ishlar amalga oshirilmoqda.

Xususan, oilaviy zo‘ravonlikni oldini olish maqsadidabirinchi navbatda qonunchilik takomillashtirildi (aloxida qonun qabul qilindi), himoya orderi berish amaliyoti yo‘lga qo‘yildi. 29 ta ayollarni reabilitatsiya qilish markazlari faoliyati yo‘lga qo‘yildi, ishonch telefoni ishga tushirildi hamda uyma-uy kirib boradigan amaliyot joriy etildi [12]

Ayollar reabilitatsiya markazi tomonidan ayollarga tibbiy, ijtimoiy psixologik va huquqiy yordam ko‘rsatilmoqda. Himoya orderi berish orqali xotin-qizlarga nisbatan turli tazyiq va zo‘ravonliklarning oldi olinmoqda.

Barcha sohalarda erkaklar va xotin-qizlar uchun teng huquq va imkoniyatlarni ta‘minlash maqsadida 2030 yilgacha O‘zbekistonda gender tengligiga erishish Strategiyasi tasdiqlandi. Yagona yondashuv asosida vazirlik va idoralar faoliyatini samarali tashkil etish va muvofiqlashtirish maqsadida Oliy Majlis Senati qoshida Xotin-qizlarning jamiyatdagi rolini oshirish, gender tenglik va oila masalalari bo‘yicha respublika komissiyasi tuzildi.

Oila va xotin-qizlarni qo‘llab-quvvatlash, ularning huquq va qonuniy manfaatlarini himoya qilish sohasidagi yagona davlat siyosatini amalga oshiradigan Oila va xotin-qizlar qo‘mitasi tashkil etildi.

Amalga oshirilgan ishlar natijasida xotin-qizlar ulushi boshqaruv sohaslarida 35 foizga, tadbirkorlik sohasida 37 foizga, siyosiy partiyalarda 46 foizga oshdi. Xotin-qizlarimizni oliy ta‘lim bilan qamrab olish ko‘rsatkichi 2017 yilga nisbatan 5 barobarga ortdi [13].

Ta‘lim va ilmni mustahkamlash yo‘nalishida xotin-qizlar uchun qulay sharoitlar yaratildi, yangi kvotalar, grantlar ajratildi, magistraturada o‘qish istagi bo‘lgan ayollar uchun to‘lovlar davlat tomonidan moliyalashtiriladigan amaliyot joriy etildi.

Xususan, har yili muhtoj yolg‘iz ayollar va boquvchisini yo‘qotgan qizlarni oliy ta‘limdagi, shuningdek, magistratura bosqichida o‘qiyotgan barcha xotin-qizlarning kontrakt to‘lovlari qoplab berish tizimi joriy etildi, xotin-qizlarning ta‘lim kontraktlarini to‘lash uchun (7 yil muddatga) foizsiz ta‘lim kreditlari ajratilishi, doktoranturaga xotin-qizlar uchun har yili kamida 300 tadan maqsadli kvota ajratib borilishi yo‘lga qo‘yildi. Ushbu maqsadlar uchun davlat budjetidan har yili 2 trln so‘m mablag‘ yo‘naltirilmoqda.

Shuningdek, bandlikni ta‘minlash va kasb-hunarga o‘qitish borasida davlat tomonidan ayollarni qo‘llab-quvvatlash maqsadida subsidiyalar, kreditlar ajratilmoqda, yangi imkoniyatlar yaratilmoqda. Bu borada respublika hududlarida, chekka mahalla va qishloqlarda Xotin-qizlar tadbirkorlik markazlari tashkil etilib, unlarda xotin-qizlar o‘qitilmoqda.

Ikkinchidan, xotin-qizlarning iqtisodiy hayotdagi va tadbirkorlik sohasidagi faoliyatining barqarorligi ta‘minlanmoqda.

Ayollarimiz iqtisodiyotning barcha asosiy «drayver»larida– u sanoat bo‘ladimi, qishloq xo‘jaligimi, kichik biznesmi, oilaviy tadbirkorlikmi, xizmat

ko'rsatishmi, barcha-barchasida o'zilarining muhim hissalarini qo'shib kelmoqda. Buning evaziga bugungi kunda iqtisodiyot va sanoat tarmoqlarida ayollarning ulushi 46 foizni tashkil etmoqda. Agar 2017 yilda xotin-qizlarning tadbirkorlik sohasidagi ulushi 21 foiz bo'lgan bo'lsa, bugungi kunda- 37 foizni tashkil qilmoqda [6].

Birgina 2022 yilda tadbirkorlik faoliyatini boshlash istagida bo'lgan 95 mingdan ortiq xotin-qizlar tadbirkor sifatida davlat ro'yxatidan o'tkazildi va bugungi kunga qadar ushbu tadbirkor xotin-qizlar tomonidan 184 mingga yaqin yangi ish o'rin yaratildi.

So'nggi 5 yil ichida O'zbekistonda ishbilarmon ayollar safi ikki barobar kengayib, o'z biznesini yo'lga qo'ygan tadbirkor xotin-qizlar soni 205 mingdan oshdi. 2023 yilda 279 mingdan ziyod tadbirkorlik loyihalariga 13 trillion so'mdan ortiq kredit, qariyb 57 ming nafar xotin-qizga salkam 300 milliard so'm subsidiya ajratildi. Shuningdek, 200 mingga yaqin ayollar kasb-hunar va tadbirkorlikka o'qitildi. Eng asosiysi – 400 mingdan ortiq xotin-qizlar ish bilan ta'minlandi [7].

Uchinchidan, xotin-qizlarning tadbirkorlik qilish borasidagi taklif va tashabbuslarini amalga oshirishda ro'y berishi mumkin bo'lgan turli byurokratik va boshqa turdagi to'siqlar va kamchiliklar ustida tizimli ishlar amalga oshirildi.

Bunda vaqtincha ishsiz, ijtimoiy-iqtisodiy ahvoli og'ir, muhtoj yolg'iz ayollar va boquvchisini yo'qotgan qizlarni yanada qo'llab-quvvatlash, ularning iqtisodiy hayotda faol ishtiroki uchun imkoniyatlar yaratildi, ularning tadbirkorlikka bo'lgan tashabbuslarini amalga oshirish va amaliy yordam ko'rsatish maqsadida turli imtiyozlar, kredit va subsidiyalar ajratildi.

E'tibor beradigan bo'lsak, 2020-yildan boshlab yo'lga qo'yilgan «Ayollar daftari» tizimi orqali qariyb 2,5 milliondan ortiq xotin-qizlarga ijtimoiy-iqtisodiy, tibbiy, huquqiy va psixologik ko'mak berish uchun 5,1 trillion so'mdan ziyod mablag' yo'naltirildi.

Natijada xotin-qizlarning iqtisodiy mustaqilligi mustahkamlandi, daromadlari oshdi va ularning bandligi ta'minlandi.

Bu yerda yana bir muhim jihat bor, ya'ni sohada siyosatimizning muhim nuqtasi – xotin-qizlar ijtimoiy huquqlarini ta'minlash orqali kambag'allikni qisqartirishdir. Birgina qishloq xo'jaligining turli sohalarida 1,5 mlndan ortiq xotin-qizlar mehnat qiladi, qishloq ayollari faolligi bilan hududlarining ijtimoiy-iqtisodiy yuksalishida alohida hissa qo'shadi.

Xotin-qizlarni ijtimoiy-iqtisodiy qo'llab-quvvatlash, ularning doimiy daromad manbaiga ega bo'lishini ta'minlash maqsadida manzilli ishlash tizimi joriy etildi. Asosiy e'tibor ijtimoiy faol bo'lmagan xotin-qizlarning jamiyat va iqtisodiy hayotda faoligini oshirishga qaratildi. Birgina Ayollar daftari orqali so'nggi yillarda millionlab xotin-qizlarga ko'mak berildi.

2023 yilning o'zida «Ayollar daftari» bo'yicha 1 trillion 234 milliard so'm hisobidan qariyb 994 ming nafar xotin-qizning muammosi hal etilgani bu fikrni tasdiqlaydi [7].

Horijiy olimlar ta'kidlaganidek, yigirma birinchi asrda aynan ayollar «yangi iqtisod kompaniyalari», yuqori texnologiyalarda o'zlarini muhim hissalarini qo'shish orqali davlatlarning milliy iqtisodiyotini rivojlantirishda asosiy rolni o'ynaydi [8–10].

Xulosa

1. Bugungi kunda xotin-qizlarni qo'llab-quvvatlash tizimining normativ huquqiy bazasini xalqaro standartlardan kelib chiqqan holda takomillashtirish ishlarini davom ettirish, gender ekspertizasidan samarali foydalangan holda xotin-qizlar uchun imkoniyat va kafolatlarni yanada kengaytirish, iqtisodiy tazyiqlarning oldini olishga oid normalar tadbqiq etish muhim hisoblanadi.

2. Gender tengligini ta'minlashga oida turli stereotiplarning oldini olish, unga oid xuquqiy me'yorlarni aholi orasida keng targ'ib qilish dolzarb vazifa hisoblanadi.

3. Xotin-qizlarni zamonaviy kasblarga, ayniqsa, axborot texnologiyalari, dasturlash, onlayn tijorat qilish sohalarida o'qitish, ushbu sohada mehnat faoliyatini amalga oshirish uchun imkoniyatlar yaratish masalalariga e'tibor qaratish.

4. Qishloq joylaridagi ayollarining yashash prinsiplari va tajribalarini inobatga olgan holda, ularning ijtimoiy-iqtisodiy faolligini oshirish muhim hisoblanadi.

5. Xotin-qizlarning munosib ish bilan bandligini tashkil qilish yondashuvlarini takomillashtirish, bu borada milliy qonunchilikni xalqaro standartlar asosida rivojlantirish muhim hisoblanadi.

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Muqumova H.I.
Qarshi davlat universiteti o`qituvchisi
Ishpulatov B.B.
Qarshi davlat universiteti talabasi

GEOGRAFIYA MAYDONCHASIDA METEOROLOGIK KUZATISHLAR

Annotatsiya. Ushbumaqolada geografiya maydonchasida meteorologik kuzatishlarni tashkil qilish, kuzatish natijalarini qayta ishlash va ulardan foydalanish masalalarini yoritishga harakat qilindi.

Kalit so`zlar: Meteorologiya quttisi, Flyuger, Yog'in o'lchagich, Qor o'lchagich, Tuproq termometrlari.

Mukumova H.I.
teacher
Karshi State University
Ishpulatov B.B.
student
Karshi State University

METEOROLOGICAL OBSERVATIONS IN THE FIELD OF GEOGRAPHY

Abstract. In this article, an attempt was made to clarify the issues of organization of meteorological observations, processing of observation results and their use in the field of geography.

Key words: Meteorological box, Fluger, Rain gauge, Snow gauge, Soil thermometers.

Geografiya ta'limi o'quvchilarda Yer haqidagi ilmiy dunyoqarashlarini shakllantiradi, ijtimoiy-iqtisodiy bilimlarini tarkib toptiradi, dunyo davlatlari va turli regionlardagi jamiyat va tabiatning o'zaro bog'liqligi, geografik ob'yekt, jarayon va hodisalar haqidagi bilim va tushunchalar bilan qurollantiradi. Bu esa Yer kurrasining tabiiy manzarasi, ishlab chiqarish samaradorligini oshirish, aholi turmush darajasini ko'tarish, atrof muhit holatini yaxshilash vositalari va usullari haqida mantiqiy fikrlashga undaydi. Binobarin, geografiya ta'limi o'quvchilarda umuminsoniy ma'naviyatning tarkibiy qismi bo'lgan geografik madaniyatni ta'minlaydi.

Geografiya – insoniyat yashovchi sayyora, ya'ni Yer haqida to'liq tasavur hosil qilish uchun ma'lumot berishga qaratilgan yagona o'quv fanidir. Geografiya ta'limi Yer kurrasida ro'y beruvchi tabiiy va ijtimoiy-iqtisodiy jarayonlar hamda hodisalarni o'rgatadi.

So'ngi yillarda mamlakatimizda ko'pgina maktablarda geografiya maydonchasini tashkil qilishga e'tibor ancha kuchaydi. Maktab geografiyasi oldiga qo'yilgan bu muhim vazifalarni bajarishda geografiya maydonchasi ham muhim ahamiyat kasb etadi. Geografiya maydonchasi ta'limni ko'rgazmali va qiziqarli qilishda, o'quvchilarga chuqur bilim va tajriba berishda ahamiyatli bo'lib, u ta'lim va tarbiyaning samaradorligini oshirishga katta ta'sir ko'rsatadi. Geografiya maydonchasi hamma geografiya kurslarini o'qitilishining ilmiy darajasini yuqori ko'tarilishida va geografik qonuniyatlar, xodisalar, obyektlarni muammoli yondoshish asosida o'rganishda hamda o'quvchilarda tabiat va xo'jalik hodisa va ob'yektlari ustidan kuzatish olib borishga imkon beradigan malaka va ko'nikmalarini shakllantirishda o'z ifodasini topgan. Ayrim maktablarda kuzatish ishlari yaxshi tashkillangan. Lekin, geografiya maydonchasida meteorologik va boshqa kuzatishlar izchil olib borilmayapti, hamda kuzatish natijalarida dars jarayonida foydalanishga unchalik e'tibor berilmayapti. Shuning uchun Respublikamiz maktablarida olib borilayotgan foydali tajribalarni to'plash, taxlil qilish va umumlashtirish muhimdir. Ma'lumki, ob-havo elementlari tabiatdagi ko'p jarayonlarni vujudga kelishida, tabiat komponentlarining shakllanishida katta rol o'ynaydi. Xalq xo'jaligi turli tarmoqlarining rivojlanishi, aholining hududiy tarqalishi va ularning salomatligi ham ob-havo va iqlim bilan chambarchas bog'liqdir. Ob-havo va uning o'zgarish sabablarini bilishga qiziqmagan kishi topilmaydi. Bundan tashqari maktab dasturi bo'yicha o'rganiladigan mavzular, masalan ob-havo va uni oldindan aytish, iqlim, shamol, yog'in-sochin, bulutlar va boshqa meteorologik elementlarni o'rganish o'quvchilar uchun tushunarli bo'lishida maktabda olib boriladigan meteorologik kuzatish ma'lumotlaridan foydalanish zarur. Bunda aniq va izchil tashkillangan meteorologik kuzatishlar o'quvchilarga geografiya ta'limida ilmiy tadqiqotlarni amalga oshirishga imkon beradi.

Geografiya maydonchasining meteorologiya bo'limda meteorologiya quttisi o'rnatish kerak. Bunday qutti maxsus konstruksiya bo'yicha yasaladi. U yerdan 2 m balandda o'rnatilib eshigi shimol tomonga qaratilgan bo'lib, tomi ikki qavat qilib yopilgan, uning o'lchamlari quyidagicha quttining balandligi 525 mm. Buyi 460 mm, eni 290 mm qutti devorlari qalinligi 6 mm eni 35 mm yog'och taxtachalardan yasaladi. Quttichaga quyosh nuri tushmasligi uchun reyklar 45⁰ mm burchak bilan qiya qilib o'rnatilgan bo'lib, ular orasidan shamol bemalol o'ta oladi. Qutti oq rangga buyaladi. Qutti ichida shtativ bo'lib, unga psixrometr, harorat o'lchov asbobi (termometr) o'rnatiladi. Quttining shtativda quyi qismiga mutloq va eng past termometrlar yotiq holatda yotqizib qo'yiladi. Psixrometrvertikal holatda (tik) o'rnatiladi.

Geografiya maydonchasida amaliy kuzatuv ishlari olib borish. Flyuger asbobi yordamida «Shamolning kuchi va yo'nalishi qanday aniqlanadi?» mavzusini quyidagicha tushuntiriladi. Shamolning yo'nalishi uchun strelkasi pastida sakkizta ko'rsatkich mahkamlangan, ular ufqning asosiy va oraliq tomonlarini ko'rsatadi. Strelka bilan birga flyugerning yuqori tomoniga

o'rnatilgan ramka ham aylanadi. Bu ramkada erkin osilib turgan metall plastinka bo'lib, shamol qancha kuchli essa, plastinka o'zining odatdagi holatida shuncha ko'p og'adi. Plastinka og'ishiga qarab shamolning kuchini aniqlaymiz. Shamolning kuchi va tezligini taxminiy aniqlash ham mumkin. Shamol kuchi 1-12 ballgacha bo'ladi. Har kuni ob-havo taqvimidan foydalanib shamol yo'nalishini flyuger yordamida aniqlab belgi qo'yib boriladi.

Flyuger shamol yo'nalishini aniqlashga xizmat qiladi. Flyuger strelkasi (flyugarka) unda erkin aylanadi. Uning o'tkir uchi shamol kelayotgan tomonga yo'nalgan bo'ladi. Shamol gorizont (Ufq)ning qaysi tomonidan yo'nalayotgan bo'lsa, shu nom bilan ataladi; agar shamol g'arbdan esayotgan bo'lsa, uni shimoli-g'arbiy, shamol janubiy sharqdan esayotgan bo'lsa, janubiy sharqiy shamol deb ataladi. Flyuger 10-12 m balandlikka temir yoki yog'och ustun ustiga o'rnatiladi. Ustun-metrlarga bo'linib, birinchi metri oqqa keyingi qoraga so'ngra yana oq va qoraga almashib bo'yab chiqish mumkin. Shunda ustun balandlik o'lchagich ham bo'lib qoladi. O'quvchilar ustunga qiyoslab boshqa predmetlar; daraxt, uy, simyog'och, balandliklarni aniqlaydilar.

Yog'in o'lchagich. Geografiya maydoniga yoqqan yomg'ir, qor, do'l ko'rinishidagi yog'in miqdorini o'lchash uchun o'rnatiladi. Qishda shamol chelak ichidagi qorni uchirib ketmasligi uchun chelak atrofiga saqlagich o'rnatiladi, har bir yog'indan so'ng yog'in miqdori chelakdagi suv qatlami qalinligi o'lchanadi. Natija yog'in suvi oqib ketmay, yerga shimilmay, bug'lanib ketmay turganda yer yuzasida qancha qalinlikda suv qatlami hosil bo'lganligini bilib olinadi. Do'l yoki qor yog'ib o'tgandan so'ng yog'in o'lchagich chelak issiq joyga olib kirilib do'l va qor erigandan so'ng chelakdagi suv qalinligi qatlami o'lchanadi. Ba'zan shisha idish voronkadan qilingan oddiygina yog'in o'lchagichdan ham foydalanish mumkin. Shishacha mm bo'lingan chizig'ini ip bilan bog'lab qo'yish ham mumkin. Bunday yomg'ir o'lchagich tayyorlanayotganda shishaning tag qismi bilan voronka og'zining diametri teng bo'lishiga e'tibor berish kerak. Yomg'ir o'lchagich shunday o'rnatilishi kerakki, uning og'zi yerdan 2 m balandlikda bo'lsin. Meteorologik qutti va yog'in o'lchagichda o'lchash ishlariga qulaylik yaratish maqsadida uning yoniga 80 sm li zinalik kursiga o'rnatiladi.

Qor o'lchagich reyklar-geografiya maydonchasi janub qismiga qor yog'inidan oldinroq o'rnatib quyiladi. Reyka yaqinidagi yer yuzasi tekislanib o't o'simliklar o'rib olinadi. Reykani o'rnatish uchun 60 sm qoziq olinib u yerga qoqilib unga qor o'lchash rejasi mahkamlanadi. Qoziqli reykaning nol belgisi yer yuzi sathiga to'g'ri keladigan qilib qoqiladi. Yoki qor qalinligini o'lchash uchun ko'tarib yuriladigan reykaning ham foydalansa bo'ladi. Reyka sm, mm larda bo'lingan bo'ladi. Qor qoplarning qalinligini kuzatib borish qishloq xo'jaligi uchun muhim ahamiyatga egadir. Dalada qancha qor ko'p bo'lsa, tuproq shuncha kam muzlab bahorda nam shuncha ko'p bo'ladi, ekinlarning o'sishi uchun sharoit yaxshi bo'ladi.

Tuproq haroratini o'lchash uchun ishlatiladigan termometrlar odatda maydonchani janub qismiga o'rnatiladi. Termometr tuproq yuzasi haroratini

o'lchash uchun 3x4 m kvadrat maydoncha ajratilib 25x30 sm chuqurlikda yumshatilib qo'yiladi. Muddatli, mutloq, eng past haroratlar 5-6 sm oraliqda ketma-ket shimoldan-janubga qarab o'rnatiladi. Termometrlarning yarmi tuproqqa botib turadi. 5, 10, 15, 20 sm chuqurlikdagi tuproq temperaturasini o'lchash uchun ishlatiladigan termometrlar tuproq yuzasining g'arbiy qismiga o'rnatiladi. Bu termometrlar chuqurligi chapdan o'nga tomon oshib boradi va shkalalari shimolga qaragan bo'ladi. Termometrlar orasidagi masofa 10 sm ortiq bo'ladi. 40 sm-320 sm chuqurlikdagi temperaturani maxsus termometrlar yordamida kerakli temperaturani o'lchaydi. Bunda termometrlar orasi 50 sm chuqurlik g'arbdan sharqqa tomon oshib boradi.

Yer shari meteorologiya stansiyalarida har uch soatda havo harorati kuzatib turiladi va shularning o'rta harorati shu kungi haroratni ko'rsatadi. Oylik o'rtacha haroartni topish uchun har bir kunni haroratni qo'shib oydagi soniga bo'lib oylik harorat chiqariladi. Havo haroratining kundalik o'zgarish joyning geografik kengligiga ham bog'liqdir.

Har kungi kuzatish natialarini hisoblan chiqib, umumiy jurnalga yozilgandan so'ng o'qituvchi raxbarligida kundalik ob havoga xulosa chiqarishadi. Bu xulosa jadval tarzida ob-havo taqvimida darsdan tashqar mashg'ulotlarda foydalanilsa bo'ladi. Maktab geografiya maydonchasida o'quvchilar tomonidan kuzatishlar natijasida olingan sutkalik, oylik o'rtacha ma'lumotlaritelevizor, radio, gazeta va jurnallarda berilgan «ob-havo» ma'lumotlari bilan taqqoslanib borilishi mumkin. Bunda albatta ma'lum darajada farq bo'ladi, chunki e'lon qilinayotgan ma'lumotlar katta hududlar uchun beriladi. O'quvchi yashab turgan joy o'ziga xos mikroiqlimga ega. Chunki bu kichik hudud o'zining relyefi suv manbalariga uzoq-yaqinligi, yer yuzasining o'rmon, cho'l, o'tloq va boshqalar bilan qoplanganligiga qarab umumiy hududdan farq qiladi. Ayni vaqtda kichik hudud katta hududdan farq qiladi. Bu qonuniyatlarni o'quvchilargageografiya o'qituvchilari tushuntirib berishlari lozim.

Geografik maydonchasida meteorologik asboblardan foydalanib olib borilganmeteorologikkuzatish ishlari kelajakdachuqur geografikbilimga,puxta mantiqiy geografik fikr yurita olishigaerishiladi. O'quvchilar yashab turgan joyi ob-havosini kuzatishdan olingan ma'lumotlar asosida shu hududning o'rtacha oylik, yillik, ob-havosi haqida ma'lumotga ega bo'ladilar. Bu ma'lumotlardan kelajakda qishloq xo'jalik ishlarini to'g'ri tashkil qilishga foydalanishlari mumkin.

O'qituvchi o'quvchilarga geografik bilimlarning ma'lum qisminigina berish bilan kifoyalanib qolmay, yangi bilimlarni qunt bilan tushunarli va mazmunli qilib ularning ongiga singdirishi, ular bilan birgalikda doimo izlanishda bo'lishi uchungeografiya maydonchasi olib borilgan amaliy ishlar muhum ahamiyatga ega.

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Murodov A.Sh.
bachelor's student
Scientific adviser: Saydullaev Sh.
Tashkent State University of Economics
ORCID number: 0009-0002-6551-4769

THE WAYS OF IMPROVING AND INCREASING THE ACTIVENESS OF UZBEKISTAN COMPOSITE INDEX (UCI)

Annotation. This article investigates strategies for enhancing and developing the Uzbekistan Composite Index (UCI), which encompasses all 102 listed joint-stock companies in Uzbekistan's stock market. Utilizing a dataset spanning 1916 days, the study analyzes the historical trends of the UCI index rates, alongside fluctuations in the number of listed companies, accumulated executed quantity, and trading amount. Employing Ordinary Least Squares (OLS) regression, the research aims to uncover correlations and insights crucial for understanding the dynamics of the UCI and devising effective measures for its advancement. This analysis provides valuable insights for investors, policymakers, and market participants interested in fostering the growth and resilience of Uzbekistan's capital markets.

Keywords: descriptive statistics, correlation coefficient, regression analysis, histogram, graph-box, ANOVA table, Normality test, Collinearity test, Shapiro Wilk test, Heteroscedasticity test, Reliability test.

Introduction

Stock market indices are important because they provide valuable insights into the overall health and performance of an economy, influence investor confidence and behavior, facilitate capital formation, serve as benchmarks for investment performance, inform policymaking decisions, and impact a country's international standing. Therefore, in this research, we mainly focused on improving the performance of Uzbekistan Composite Index (UCI) and this research including some steps. Firstly, identifying dependent variable which we are going to develop, is core of analysis and the main dependent variable is Uzbekistan Composite index rate during the 8 years. Secondly, identifying variables that influence the increasing or decreasing of the rate of the stock index. That are the number of listed companies, since, Uzbekistan Composite index consists of all companies listed and accumulated executed quantity that refers to the total number of shares or contracts of a particular security that have been traded and executed over a period of time. Furthermore, accumulated trading amount that refers to the total monetary value of all trades executed for a particular security over a specified period of time can be another independent variable, since it shows the level of trading and it impacts the index rate. In addition, this research

aims to construct a robust model that highlights the correlation between these variables and the index rate.

Methodology

This study takes a mixed-methods approach, combining quantitative analysis with qualitative insights, to evaluate the sensitivity of the stock index rate to the number of listed companies, accumulated executed quantity, and accumulated trading amount. The methodological approach is intended to provide a thorough knowledge of the factors impacting the UCI stock index rate, based on both statistical evidence and nuanced viewpoints from those concerned.

Data gathering:

The history of stock index including all information is searched from websites including World Bank data and UZSE official websites and is gathered.

The categories of data:

- Stock index rate(in 8 years)(index in Stata)
- The number of listed companies(Ncompanies in Stata)
- Accumulated executed quantity(Stocks Quantity in Stata)
- Accumulated trading amount(TradingAmount in Stata)
- The period(1916 days) (daysdate in Stata)

1.2 Data Analysis

Quantitative data are analyzed using statistical software (Stata 15) to identify patterns, correlations between the independent variables (*the number of listed companies, accumulated executed quantity, accumulated trading amount, the period*) and the dependent variable (*the rate of index*). **Descriptive statistics** provide a baseline understanding of the conditions of the all variables, while **inferential statistics**, including regression analysis, are employed to test the hypotheses.

Analysis and results

Figure 1 – Descriptive statistics

Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Index	1916	781.818	220.886	303.38	1443.53
NCompanies	1916	140.598	45.346	96	318
Quantity stocks	1916	1.005e+08	1.371e+09	0	5.146e+10
TradingAmount	1916	5.204e+09	5.311e+10	0	1.897e+12
Daysdate	1916	958.5	553.246	1	1916

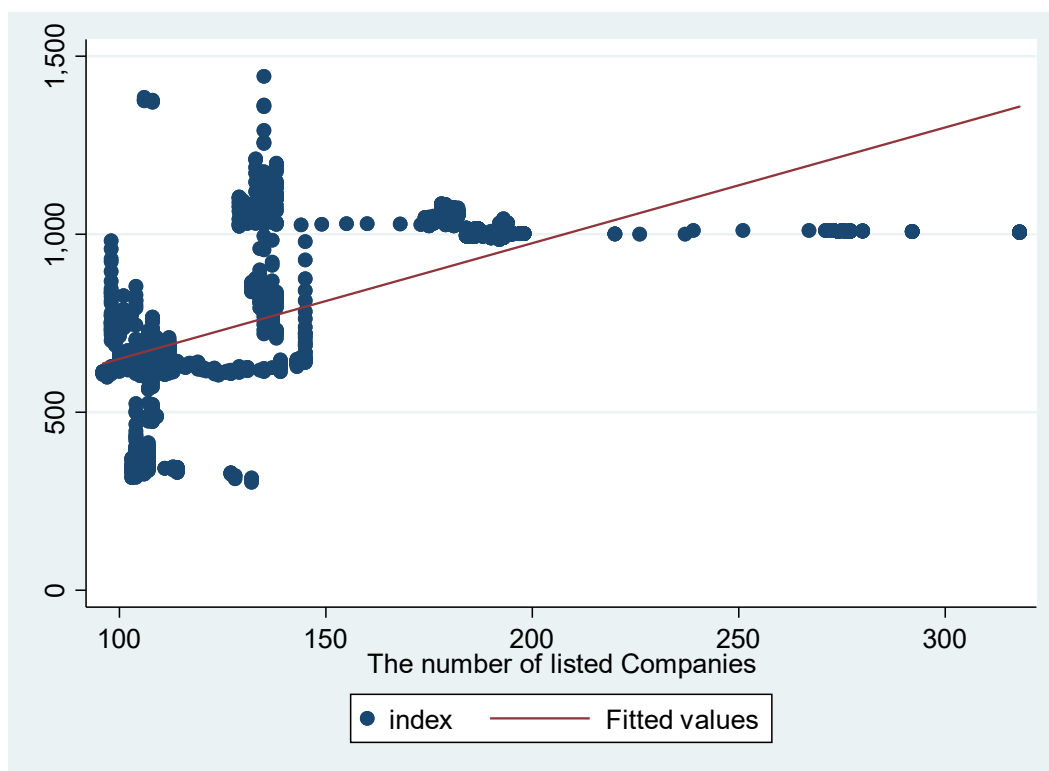
In this table, the summary of information is presented. We have 1916 observations in every variables. Firstly, the index rates include 1916 observations, its minimum and maximum rates are 303.38 and 1443.53. Its average mean equals to 781.818 and it is higher than the index current rate. The next variable is the number of listed companies consisting of 1916 observations. That's mean is 140.59 and minimum number of listed companies on UzSE is 96 and maximum is 318. The average of the accumulated executed quantity variable is 1.005e+08 (which is 100,500,000), Standard Deviation (Std. Dev.) is 1.371e+09 (which is

1,371,000,000), minimum is 0, since, on some days, stocks may not be traded and the maximum number of traded stocks (Max) is 5.146×10^{10} (which is 51,460,000,000). The next is accumulated trading amount, its mean is 5.204×10^9 (which is 5,204,000,000 sum),

Minimum is 0, Maximum (Max) is 1.897×10^{12} (which is 1,897,000,000,000 sum).

All days are 1916 and this period, the Uzse has been working

Figure 3 – Trend scatter plot



In this scatter plot, we have a new element: a red line that represents the 'fitted values', or in other words, the best fit line through the data points. It shows us the trend in the relationship between "the number of listed companies on UzSE on the x-axis and 'index rate' on the y-axis. As 'the number of listed companies' increases, the 'the index rate' also tends to increase slightly. The upward slope of the red line indicates a positive relationship between these two variables.

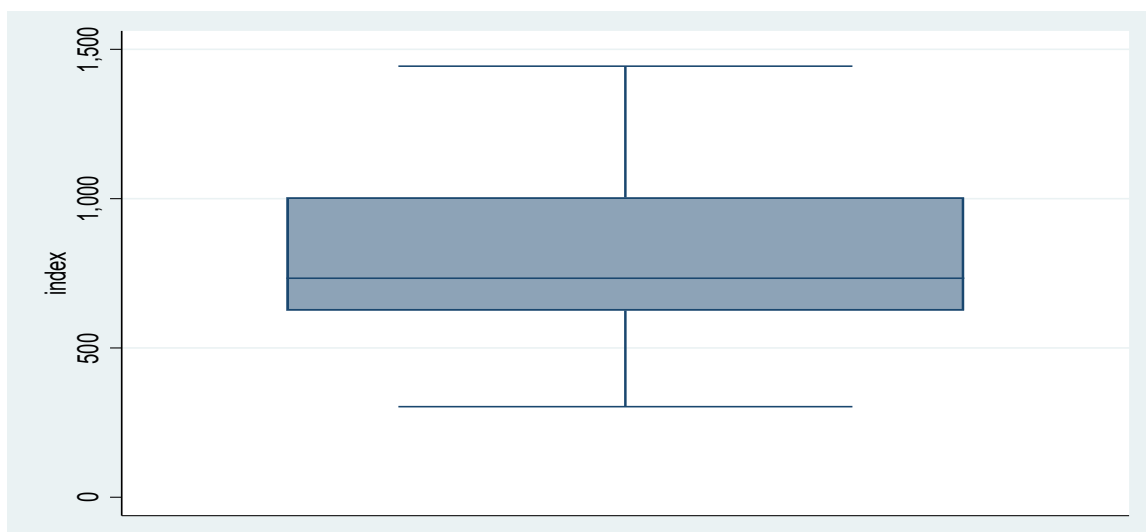
Pairwise correlations

Variables	(1)	(2)	(3)	(4)	(5)
(1) index	1.000				
(2) NCompanies	0.667* (0.000)	1.000			
(3) Quantity_stocks	-0.036 (0.117)	-0.026 (0.251)	1.000		
(4) TradingAmount	-0.006 (0.806)	-0.032 (0.165)	0.027 (0.240)	1.000	
(5) Daysdate	-0.005 (0.815)	0.008 (0.731)	0.012 (0.599)	0.024 (0.295)	1.000

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

The relationships between the various variables are shown in this table. The correlation between two variables is displayed in each cell, with a range of -1 to 1. A strong positive relationship is indicated by a correlation near 1, which means that when one increases, the other does too. A strong negative relationship is indicated by a correlation near -1, which means that as one increases, the other decreases. There is no linear relationship indicated by a correlation near 0. For instance, variable (1), «the index rate,» and variable (2), «the number of listed companies,» have a positive correlation of 0.667 that is statistically significant, as shown by the asterisk. This means they tend to increase together. However, variable (3), 'Quantity_stocks', has a negative correlation of -0.036 with variable (1), suggesting they tend to move in opposite directions.

Figure 6 – Boxplot



According to this graph box, 75% of 1916 index rates is about from 600 to 1000. However, on the lowest low and top parts of graph box, about 332 and 1480 index rates are illustrated.

Figure 7 – Linear regression

Linear regression

Index	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
NCompanies	3.251	.083	39.15	0	3.088	3.413	***
Quantity_stock	0	0	-1.09	.276	0	0	
s TradingAmoun	0	0	0.96	.339	0	0	
t Daysdate	-.004	.007	-0.63	.527	-.018	.009	
Constant	328.865	13.857	23.73	0	301.689	356.04	***
Mean dependent var	781.818		SD dependent var	220.886			
R-squared	0.446		Number of obs	1916			
F-test	384.416		Prob > F	0.000			
Akaike crit. (AIC)	24997.020		Bayesian crit. (BIC)	25019.252			

*** $p < .01$, ** $p < .05$, * $p < .1$

Model parameter interpretation

We developed a statistical model to determine what factors influence variable the index rate. This model takes into account a variety of criteria, including 'Ncompanies', 'number of stocks', and others.

This model has some predictive potential, as seen by the Prob > F value of 0.0000. This suggests there is no probability that the model's outcomes are attributable to random variation, which is good because we want this value to be less than 0.05 in order to be confidence in our model. In addition, the R-squared value is 0.446, indicating that the model can explain around 45% of the variability in our dependent variable.

Model estimation interpretation

«Ncompanies» has a coefficient of 3.251, which is statistically significant, as indicated by a p-value of 0.000 (which is less than 0.05). This means that for each unit increase in «Ncompanies», «index» is expected to increase by approximately 3.251 units, holding all other variables constant. However, the coefficients of other 2 variables equals to 0 and they are not statistically significant.

Post estimation analysis – Normality

Shapiro-Wilk W test for normal data

Variable	Obs	W	V	Z	Prob>z
index	1,916	0.931	78.203	11.072	0.000
NCompanies	1,916	0.804	224.070	13.745	0.000
Quantity_s~s	1,916	0.041	1093.904	17.772	0.000
TradingAmo~ t	1,916	0.062	1070.147	17.716	0.000
Daysdate	1,916	0.955	51.482	10.010	0.000

Shapiro Wilk test helps us to know the data is normal distributed (the value of W should be close to 1) and realizing statistical significance (H0 hypothesis, if $p > 0.05$). Index rate and Number of companies datasets are normal distributed but their values are not significant and others left are not normal distributed. We realize that in this test, a independent variable is normal distributed but not statistic significant.

Shapiro-Wilk W test for normal data

Variable	Obs	W	V	z	Prob>z
ehat	1,916	0.956	50.266	9.949	0.000
yhat	1,916	0.803	224.743	13.753	0.000

According to this, w is near 1, it means, data is normal distributed, however, if $p < 0.05$, this is not statistical significance.

ESTAT VIF

Variable |VIF1/VIF

-----+-----
TradingAmo~t | 1.000.997748
NCompanies | 1.000.998271
Quantity_s~s | 1.000.998501
Daysdate | 1.000.999218

-----+-----
Mean VIF | 1.00

There is no multicolliniarity because of mean vif < 10

ALPHA TEST

RELIABILITY

ALPHA TEST

Test scale = mean(unstandardized items)

Average interitem covariance: 0.1575

Number of items in the scale: 7

Scale reliability coefficient: 0.5669

In this alpha test, we can know the percentage of our data reliability. Data Reliability is 56%.

Conclusion

The research mainly focused on analysis of Uzbekistan Composite Index and concluded with some recommendations for increasing the activeness of UCI. However, As UCI includes all listed joint-stock companies on UzSE, the increase in well performing of stock index depends on joint-stock companies, free-float directly, and accumulated executed quantity, accumulated trading amount and other factors influence indirectly the index rate. It should be noted that joint-stock companies occupy a very important place in the system of a market economy. They are one of the most advanced forms of organization of a legal entity among business entities, an important source of investment that attracts free funds in production, cover wide sections of the population in the formation of a class of owners (Yuldashev, 2023). Therefore, the article analyzed them by using OLS regression method. With OLS regression analysis, we can identify problems and give recommendations for developing and improving the activeness of UCI index. OLS regression analysis showed us **the positive correlation of the number of companies and the index rate**, and the first scatter plots show us that **accumulated executed quantity and trading amount have negative and positive correlations with the index rate**. It means, listing joint-stock companies that has high free-float and high liquidity stocks influences more the index rate and show well performing. And in order to increase the investment attractiveness of large issuing companies of strategic importance, it is necessary to gradually reduce the state share in their share capital structure (Ataniyazov & Sayfullokhon, 2022)

Recommendations

- **Listed more joint-stock companies:** In this research, the number of joint-stock companies and the index rate together has positive correlation, however, we should focus on another part, accumulated executed quantity has negative but accumulated trading amount has positive correlation with the index rate. It means that joint-stock companies that its shares' price are higher should be listed on UzSE. After this, the accumulated executed quantity will be less and accumulated trading amount will be high.

Decreasing the number of state-owned joint-stock companies or their shares:

In Uzbekistan, according statistical information, there are a total of 627 joint-stock companies (JSCs) in Uzbekistan. Of these, 244 JSCs have shares directly owned by the state, making up about 84.7% of all issued stocks based on

nominal value. Furthermore, 132 JSCs are owned by state holdings, which are formally known as «Economic Management Bodies» It is required to progressively reduce the state share in the share capital structure of large issuing companies of strategic importance in order to increase their investment attractiveness.

The companies should perform **IPO** and **SPO**, and their shares should trade on the platforms. That is increasing the activeness of Stock Exchange and it leads to investments to expand the companies.

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Musajonova G.A.
talaba
ADTI
Noibjonova X.M.
assistent
ADTI

LIPIDLARNING BIOLOGIK AHAMIYATI

Annotatsiya. Ushbu maqolada inson organizmi uchun muhim bo'lgan moddalar sinfi-lipidlar, ularning sinflari, ayrim vakillarining biologik ahamiyati haqida bayon qilingan.

Kalit so'zlar: lipid, sovunlanadigan lipid, mum, sitral, omega-3, araxidon kislotalari.

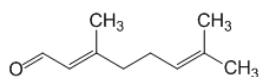
Musajonova G.A.
student
ADTI
Noibjonova X.M.
assistant
ADTI

BIOLOGICAL SIGNIFICANCE OF LIPIDS

Abstract. This article describes a class of substances important for the human body - lipids, their classes and the biological significance of some of their representatives.

Key words: lipid, saponifiable lipid, wax, citral, omega-3, arachidonic acid.

Tirik organizmlarning hayot faoliyatida lipidlar muhim ahamiyatga ega. Ular barcha tirik hujayralar tarkibida bo'ladigan yog'simon moddalardir. Lipidlar organizmda nerv impulsini uzatishda, muskullar qisqarishida, ko'pgina fermentlarning faolligiga ta'sir ko'rsatish, hujayralararo kontaktlarni yuzaga keltirishga va immunokimyoviy jarayonlarning amalga oshishi kabi funksiyalarni bajaradi. Lipidlar yuqori yog` kislotalari, spirtlar yoki aldegidlarni hosilalaridir. Ishqoriy yoki kislotali muhitda gidrolizga uchrashi bo'yicha lipidlar ikki guruhga bo'linadi: sovunlanadigan va sovunlamaydigan lipidlar. Ular ham o'z ichida qaysi birikmaning hosilasi ekanligiga qarab ham turlarga ajratiladi. Sovunlamaydigan lipidlar ikki turga: terpenlar va steroidlar ga ajratiladi. Terpenlar ikki va undan ortiq ochiq yoki yopiq zanjir holida birikkan izopren qoldiqlaridan iborat. Terpenlar ham o'z ichida ochiq zanjirli va halqali guruhlarga ajratiladi. Terpenlardan tibbiyotda keng miqyosda foydalaniladi.

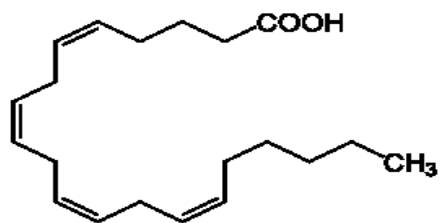


Sitral- $C_{10}H_{16}O$ asiklik monoterpen bo`lib, limon moyida ko`p miqdorda bo`ladi. Sitral tibbiyotda asosan keratit, konyuktivit kabi ko`z kasalliklarini davolashda ishlatiladi. Sitralning tibbiyotdagi ahamiyati shundaki, u og`riqni qoldiruvchi va yallig`lanishni davolovchi ta`sirga ega. Sitral riboflamin bilan birgalikda qo`llansa, ko`zning shox parda va konyuktivit epiteliysi yangilanishini tezlashtirib beradi. Sitral emizikli onalarda ko`krak bezidagi yoriqlarni qayta tiklash xususiyatiga ega.

Bir halqali terpenlarga limonenni misol qilib keltirish mumkin. Limonen-2 enantiomer ko`rinishda uchraydi. (+) Limonen apelsin, selderiy va zira moyida uchraydi. (-) Limonen esa, limon va archa moyida uchraydi. Limonen o`ziga suvni biriktirib olishidan terpengidrat hosil bo`ladi. Terpengidrat tibbiyotdabalg`am ko`chiruvchi (bronxit) antiseptik va siydik haydovchi vosita sifatida qo`llaniladi. Steroidlarga – buyrak usti bezi gormonlarini, jinsiy gormonlarni, o`t kislotalarini, D-darmondorilarini kiritishimiz mumkin.

Sovunlanadigan lipidlar oddiy va murakkab guruhlarga ajratiladi. Sovunlanadigan oddiy lipidlarga uch atomli spirt glitserinning yuqori molekulyar to`yingan va to`yinmagan bir asosli karbon kislotalar bilan hosil qilgan murakkab efirlar: moylar, yog`lar kiradi. Yog`larning ozuqaviy qiymati sintezlanmaydigan almashtirib bo`lmaydigan yog` kislotalarning miqdori bilan aniqlanadi. Bunday kislotalarga linol kislotasi kiradi. Ushbu kislotaga inson organizmining sutkalik ehtiyoji 3-6 gr ni tashkil etadi. Bu miqdor esa 12-15 gr o`simlik moyida bo`ladi. Linol kislotasi hujayra membranasi tarkibida Omega-3 dan 10 barobar ko`p uchraydi. Yurak faoliyatiga ijobiy ta`sir qiladi, xolesterinning umumiy miqdorini kamaytiradi, qon bosimini normallashtiradi, immunitet tizimini mustahkamlaydi, tananing qarishini sekinlashtiradi, tananing noqulay ekologik omillarga moslashishiga yordam beradi, insulinga sezgirlikni oshiradi, kognitiv funksiyalarni yaxshilaydi, ayollarning reproduktiv tizimiga ijobiy ta`sir ko`rsatadi.

Linol kislotaning organizmda yetishmasligi oqibatida terining qurishi, mushaklardagi og`riqni, tez-tez shamollashni hattoki, kallikni ham keltirib chiqarishi mumkin. Linol kislotasi organizmda araxidon kislotaga aylanadi. Araxidon kislotasi organizmda gormonal faollikning modulyatori –



prostaglandinlarni olish uchun mahsulot hisoblanadi. Prostaglandinlar mushaklar qisqarishini kuchaytiradi, qon bosimini pasaytiradi, gormonal faoliyatni taribga solib turadi. Organizmda almashinmaydigan to`yinmagan yog` kislotalarning yetishmasligi oqibatida xolesterin almashinuvining buzilishi yuzaga keladi. Natijada yurak – qon tomir kasalliklari yuzaga keladi.

Tibbiyotda zaytun moyi keng qo`llaniladi. Uning tarkibiga karotin, C, B1, B2, K, E, P vitaminlar, foli kislotasi, uglevodlar, organik kislotalar kiradi.

Mumlar- yuqori molekulyar yog` kislotalarning yuqori molekulyar spirtlar bilan hosil qilgan murakkab efirlaridir. Ular inson terisini muhofaza qiladi.

Mumlar kimyoviy tarkibiga ko'ra ko'p xollarda monokarbon kislotalardan palmitin, serotonin kislotalar hamda yuqori molekulyar spirtlardan-setil va mirisil spirtlarining murakkab efirlari hisoblanadi.

Mumlar dorishunoslikda, kosmetik va davolovchi surtmalar, moylar tayyorlashda keng qo'llaniladi.

Omega-3 yog` kislotalari kattalar va ayniqsa, keksa odamlar uchun zarurdir. Ular miya va qon tomir tizimining faoliyatini yaxshilaydi, yurak kasalliklari va ateroskleroz rivojlanishi yurak urushi xavfini kamaytiradi va immunitetni oshiradi, terini zararli ultrabinafsha nurlaridan himoya qiladi.

Xulosa qilib aytganda, lipidlar organizmda ko'plab funksiyalarni bajaradi. Ayniqsa, yurak-qon tomir tizimidagi kasalliklarning oldini olish, odam organizmi qarishining sekinlashishi, ovqat hazm qilish, organizmning gormonal boshqarilishi kabi funksiyalarda faol qatnashadi.

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Musayeva Sh.A.
professor
Samarkand Institute of Economic and Service
Uzbekistan, Samarkand

THE ROLE OF THE DIGITAL ECONOMY IN IMPROVING EFFICIENCY

Abstract. In the context of the development of the digital economy in Uzbekistan, the factors affecting the efficiency and quality of services provided by service enterprises are researched and proposals are made to improve the efficiency and quality of services.

Keywords: Digital economy, automation, efficiency factors, service quality, transformation.

Introduction. We know that there are various factors that influence the effectiveness of services. However, not all of these factors have a positive effect on service quality. Scientists argue that in the service industry, a decrease in efficiency usually leads to a decrease in quality, or vice versa.

The achieved result refers to the quality of the service provided to the client, how satisfied the client is with this service and how much this service is evaluated. Expenses are a patient wait for the return of expenses with a positive effect over time, and in case of failure, emotional and spiritual readiness for this trouble is understood.

Sales of services, profit from sales and share of services on the market, labor resources spent on providing services, and equipment and technologies used. From the client's point of view, overachievement leads to decreased self-efficacy, overvaluation and, as a result, a significant decrease in value.

Therefore, everyone knows that an improvement in one area, an increase in positive indicators, in turn, always leads to a decrease in other positive indicators in that area and a deterioration in efficiency (and) service industry managers need to improve efficiency only if they focus on other approaches, and not from the client's point of view, positive results will increase because the same approach does not always work.

Thus, efficiency and quality are independent concepts. The efficiency factor refers to the production of as much output as possible at a given cost, and the quality factor refers to the achievement of high quality productivity as a result of the service provided to customers and customer satisfaction with those services. From the outside it seems difficult to achieve such a result, increase productivity and quality of service at the same time. Using the latest literature and news, in this article we examine factors that can simultaneously improve both efficiency and quality of service.

Research methodology. Systematic approach, abstract-logical thinking, grouping, comparison, factor analysis, selective observation methods were used in the research process.

Analysis and results Factors that increase service efficiency. Although the importance of improving service efficiency is highly appreciated, due to the lack of conceptual models that capture the essence of the research field under study, changes in the field are partially covered, resulting in an insufficient scientific news database. Thus, the results of our research on the factors influencing service effectiveness and service performance indicate that these studies are conceptual rather than empirical in nature. At the moment, several factors have been studied to improve the efficiency of the service. To understand how each of them affects the quality of service, it is necessary to familiarize yourself with each of them in detail.

1. Organizational culture factor is studied on the basis of management criteria: it focuses on how resources are allocated and managed, how employees understand what is important and truly valued by the organizations in which they work, as well as on their work and how relationships influence on clients. ' perception of service quality. Such questions can be answered by studying and analyzing the criteria of organizational culture and management. Thus, it can be said that organizational culture and management criteria influence both productivity and quality.

2. Factor of standardization of services. Through standardization, businesses can reduce costs, which increases productivity and lowers prices, which in turn leads to competitive advantage.

However, the diversity of consumer demand, the participation of a large number of «personal»-individual services and a thin set of clients, coupled with an increase in the efficiency of standardization of services, also lead to a decrease in the quality of services; services are provided to a large number of clients. For example, if we take the process of transferring knowledge to students in the field of higher education, then if a large number of students study in large classrooms, productivity increases, the lack of opportunity to work individually with students leads to a decrease in their quality indicator., or in the case of a car plant, even more so. If you manufacture a car, due to inattention to some details, this will lead to a drop in the quality indicator. Standardization and quality of service are more suitable for industries where there is little variation in supply and demand and services are repetitive, such as fast food, banking, insurance, car rental and dry cleaning.

3. Automation (computerization) is a factor of new technologies. The purpose of investing in new technologies is to improve efficiency because they help replace the need for human labor with new technologies. Automation allows employees to work faster and better, while increasing productivity. The use of technology results in improved service quality while reducing costs and damage. However, this may depend on customer segments and type of service providers.

Previous research has shown that technological labor displacement is more common in industries with less direct human contact, such as banking. On the other hand, technological progress brings little benefit to the trade or hotel business. This is because it may improve efficiency but not maintain quality of service as customers see more appeal in people than in technology.

4. Factor of knowledge and professional training of service workers: human capital plays a decisive role in increasing labor productivity. This is because most services are produced by people, and therefore «the quality and effectiveness of services depends largely on people» However, attempts to complete the job faster are often unsuccessful because they can lead to errors or unsatisfactory results, which may result in the job being re-done. Working hard with employees to simultaneously improve productivity and service quality requires a focus on employee efficiency and effectiveness. Increasing employee technical skills (efficiency) means increasing employee productivity as well as the quality of their work. Field productivity is reduced due to lack of technical skills among employees, decreased productivity, and time spent on self-correction. Service workers' attitudes and behaviors (productivity) influence service quality and productivity, as dissatisfied customers can create additional workload and staff dealing with these complaints can reduce productivity. The results of the study showed that an effective hotel employee can achieve higher quality of service, and also that effective employees tend to produce more services, in this regard, the knowledge and professional skills of training service personnel are important.

5. Incentive and Recognition Factor: Research has shown that motivation at work, if explained through the back office concept, is very suitable for services with little customer contact, but on the other hand, front office is explained through the incentive concept. High levels of customer service lead to decreased productivity because service employees spend more time and effort on customers, which may improve service quality but not efficiency. Thus, recognition of incentives and recognition can improve the quality and efficiency of services in situations where human factors have less influence on customers. Because in this case, most of the employee's time is spent doing more work.

6. Employee Satisfaction Factor: As we mentioned above, we have tried to explain the concepts between employee job satisfaction and performance indicator. Employees will only work more efficiently if they are satisfied with their jobs and are loyal to their company, which in turn increases productivity. Indeed, satisfaction has a significant impact on productivity. On the other hand, when employees are dissatisfied with their jobs, they tend to be less productive. Dissatisfaction leads to a threefold increase in employee turnover, and employee turnover leads to decreased productivity and customer satisfaction. Research shows that employee satisfaction is also linked to customer satisfaction. Satisfaction motivates employees to work harder, achieve positive results in meeting customer needs, and provide good service: the more satisfied employees

are with their jobs, the better the quality of customer service. Thus, employee job satisfaction affects both productivity and quality.

7. Supply and demand coordination factor: Services are mostly produced and consumed simultaneously, which means that real-time production is important to coordinate supply and demand, such situations are especially observed in the airline and hotel service industries. For example, at the beginning of the season, demand exceeds available capacity, capacity is fully utilized, and therefore efficiency is maximized, but service quality may suffer because this situation causes customers to spend too much time queuing or customers are more likely to become frustrated with the situation. On the other hand, at the end of the season we can observe the opposite situation described above. Therefore, demand forecasting is essential to meet available resources and maximize production capacity. With proper forecasting, demand can be balanced by using part-time staff during the season or off-season, or by outsourcing some services to other support organizations. Well-trained and qualified employees help maintain the quality of service. Therefore, the same coordination of supply and demand is necessary to simultaneously improve efficiency and quality.

Conclusions. The main conclusions of the above article are that the factors that simultaneously improve efficiency and quality vary depending on the type of service industry. Therefore, in order to implement digital transformation and in connection with the growing need for quality service, to strengthen active cooperation with interested organizations and enterprises operating in the field, to develop educational standards and work training programs adopted in the service sector, as well as to carry out coordination, it is necessary to actively cooperate with specialized higher educational institutions (with scientific qualifications and experience in this field).

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*Mustafaqulov A.A.
Jizzax politexnika instituti
pedagogika fanlari bo'yicha falsafa doktori (PhD)
Kushbakov Q.S.
Jizzax davlat pedagogika universiteti
«Maktab menejmenti» kafedrasida o'qituvchisi*

OLIV TA'LIM MUASSASALARINI BOSHQARISHNING ZAMONAVIY TENDENSIYALARI

Annotatsiya: ushbu maqola yildan-yilga sifatli ta'lim olishni xohlovchilar sonining keskin oshib borayotganligi, ta'lim oluvchilarning o'qish ehtiyojlari kengayib borishi, yangi mutaxassisliklarning paydo bo'lishidan kelib chiqqan holda oliy ta'lim tizimida ta'lim sifatini boshqarish hamda raqobatbardosh kadrlarni tayyorlashni takomillashtirishning ayrim masalalariga bag'ishlangan.

Tayanch so'zlar: Ta'lim sifati, ta'lim sifatini boshqarish, zamonaviy tendensiyalar.

*Mustafaqulov A.A., doctor of philosophy in pedagogical sciences (PhD)
Jizzakh Polytechnic Institute
Kushbakov K.S.
teacher
"School Management" department
Jizzakh State Pedagogical University*

MODERN TENDENCIES OF MANAGEMENT OF HIGHER EDUCATION INSTITUTIONS

Abstract. There are enlightened some issues of increasing of management in the sphere of higher educational institutions and improving of preparation of compete able personal as educates of different spheres are increasing and widening of study demand by appearing of new specialists.

Keywords: Quality of education, management quality of education, modern tendencies.

Mamlakatimizda iqtisodiyotni innovasion yondashuvlar asosidariyojlantirish bilan bog'liq holda xorijiy texnologiyalarni o'rganish, tajribalar almashish hamda xorijiy mutaxassislar bilan hamkorliklarni yo'lga qo'yish, mutaxassis kadrlar tayyorlashda fan, ta'lim va ishlab chiqarish integratsiyasining zamonaviy modelini yaratish va ta'lim sifatini takomillashtirishning me'yoriy-asoslari yaratildi. O'zbekiston Respublikasi Prezidentining 2019 yil 8 oktyabrda «O'zbekiston Respublikasi oliy ta'lim tizimini 2030 yilgacha rivojlantirish konsepsiyasi» to'g'risidagi PQ-5847-son farmonida «Ijtimoiy soha va iqtisodiyot

tarmoqlarining barqaror rivojlanishiga munosib hissa qo'shadigan, mehnat bozorida o'zo'rnini topa oladigan yuqori malakali kadrlar tayyorlash tizimini yo'lga qo'yish» ustuvor vazifa etib belgilangan [1].

Ta'limning muhim ahamiyatini anglash - sifatli ta'lim taqdim etish va o'zlashtirish sifati fenomeniga alohida qiziqish uyg'otdi. Ushbu tushunchaning paydo bo'lishi so'nggi yillar bilan bog'liq, deb aniq aytish qiyin. Ammo, unga nazariyachilarning e'tibori zamonaviy turmush sharoitida hayot sifati va ta'lim sifati o'rtasidagi bog'liqlik, ijtimoiy-iqtisodiy modernizatsiya va shaxsning o'z-o'zini anglash jarayonining sifatli ta'lim bilan yaqqol bog'liqligi nomoyon bo'lmoqda.

Ilgari ta'lim sifati muammosi vaqti-vaqti bilan tashkil etiladigan yomon o'zlashtirishga qarshi kurash kampaniyalari orqali hal qilingan holatda, ta'lim tizimining yutuqlari yoki kamchiliklarining ko'rsatkichi sifatida alohida va qoloq ta'lim oluvchilarning sonini hisoblashga qaratilgan miqdoriy yondashuv ustunlik qilar edi.

So'nggi yillarda pedagogikada gumanistik pozitsiyalarning mustahkamlanishi bilan ta'lim sifati o'rtasidagi bog'liqlikka alohida e'tibor qaratilmoqda. Bundan tashqari, mazkur holat umumevropa jarayonlarining hosilasidir deb qarasa xato qilmagan bo'lamiz. Boloniya shartnomasida ishtirok etayotgan mamlakatlar ta'limni modernizatsiyalashning ustuvor yo'nalishi sifatida uning sifati vabaholanishini ta'minlaydigan tartiblar bajarilishi kerakligiga e'tibor qaratganlar.

G'arb mamlakatlarida ta'lim sifati muammosi o'tgan asrning ikkinchi yarmida muhokama predmetiga aylandi. Bunga ikkita misolni keltiramiz. 1960 yil 14 dekabrda YuNESKO Konferensiyasi davlat ta'lim muassasalarida sifatli ta'lim olishni kafolatlaydigan ta'lim standartlari, ya'ni natijalar va mazmunga yondashuvlarning yagonaligi va shartlarning ekvivalentligini ta'minlash Konvensiyasi qabul qilindi: «(b) To ensure that the standards of education are equivalent in all public education institutions of the same level, and that the conditions relating to the quality of education provided are also equivalent» - Ta'lim standartlari bir xil darajadagi barcha davlat ta'lim muassasalarida ekvivalent bo'lishini va taqdim etilayotgan ta'lim sifatiga tegishli shart-sharoitlar teng bo'lishini ta'minlaydi» [9]. Undan tashqari 1960 yilda, Amerika Qo'shma Shtatlarida ta'lim sifatini o'rganish bo'yicha tadqiqotlar o'tkazildi: «The Quality Measurement Project, A Research Activity Conducted By The New York State Education Department» - Sifatni o'lchash loyihasi, Nyu-York shtatining Ta'lim departamenti tomonidan olib borilgan tadqiqot faoliyati. Ushbu tadqiqotning maqsadi maktab ta'lim tizimi tomonidan taqdim etilgan ta'lim sifatini mustaqil baholash uchun texnologiyalarni ishlab chiqish edi – «the purposes of the quality measurement project were to develop techniques for assessing the quality of education provided by a school system..». Shunga qaramay, ta'lim sifatiga alohida e'tibor qaratish o'tgan asrning to'qsoninchi yillaridan boshlandi.

O'tgan asrning to'qsoninchi yillarining oxiriga kelib Fransiyada bo'lib o'tgan xalqaro konferensiyada oliy ta'lim uchun «ta'lim sifati» tushunchasi kiritildi. Mazkur konferensiyada oliy ta'limdagi asosiy parametrlar nuqtai nazaridan sifat darajasini doimiy tarzda kuzatib, nazoratga olib borish va uni ko'tarishkelgusidagi asosiy vazifalardan, deb hisoblandi [4]. Mazkur holat oliy ta'lim sifatini oshirib borish har bir millatning xavfsizligini ta'minlovchi strategik soha deb belgilab olindi.

Ta'lim xarakteristikalarini talqin qilinishida sifat va ta'lim tushunchalari ahamiyatini mos qo'yish sifatini amalga oshirishning ikkita mumkin bo'lgan yondashuvini taqdim etish imkoniyatini beradi. Shaxs rivojlanishiga e'tibor qaratiladigan bo'lsak, u holda ta'lim sifati uning eng yuqori qismi bo'lib, u shaxsning xususiyatlarini aniqlaydi. Bundan kelib chiqadiki, shaxs ta'lim sifati tavsifiy-ifodaviy xususiyatga egadir, chunki u ob'ektning o'lchamining biron bir tartibiga mos kelmaydi. Har bir inson uchun alohida standart qaralib, inson hayotidavomida erishgan yutuqlari unga nisbatan solishtiriladi.

Ta'lim tizimidagi ta'limiy dasturlarga, ta'lim xizmatlarini ko'rsatishdagi shart-sharoitlar, natijalar va ularning amaliyotga tadbqiqiga, umumiy holda tan olingan standartlarga, ijtimoiy va shaxsiy talablarga mos kelishi - amaliy sharoitlarda sifatli ta'limni namoyon etadi. Birinchi ta'rifning o'ta murakkabligi tufayli pedagogika fanlari uning asosida yotgan g'oyasiga nisbatan mo'ljalni oladi, chunki pedagogik amaliyot predmet ma'nosida ta'limiy-tarbiyaviy sifatlarni shakllantirish, rivojlantirish va takomillashtirishga yo'naltiriladi.

Ta'lim sifatining turli darajadagi xarakteristik jihatlarini qayd etilgan yondashuvga asosan ajratib ko'rsatish mumkin. Bu esa ko'p hollarda alohida komponentlarni qayd etish metodi orqali aniqlanadi. Kutubxonalarni talablarga to'liq javob berishi, ularni kompyuterlar bilan ta'minlanganligi ta'lim parametrlari natijalari sifatida – ilmiy-pedagog kadrlarning klassifikatsiyasigata'sir ko'rsatadi.

O'lchov va matematik hisob-kitob qilish mumkin bo'lgan mezonlarni tanlash ehtiyojining mavjudligi ayni haqiqatdir. Biroq, qayd etilgan fundamental falsafiy talqinni mavhumlashtirsak ham ta'lim sohasida «standartlashtirilmagan» elementlar alohida ahamiyatga ega ekanligini unutmashimiz kerak. Ta'lim standartlari so'zning qat'iy ma'nosida DTS (Davlat Ta'lim Standarti) emasligi bejiz emas, chunki har qanday DTSning o'ziga xos xususiyati bu raqamlarni aniqlash va o'lchash mumkin bo'lgan ko'rsatkichlardir. Yo'l qo'yilishi mumkin bo'lgan xatolarni hisobga olgan holda, ta'lim sifatini aniq raqam bilan ifodalash mumkin emas.

Davlat ta'lim standartlari malaka talablari ta'lim natijalariga olib keladi, uning natijasi sifatida umumkasbiy va kasbiy kompetensiyalar tushuniladi. Kompetentli deyilganda- nafaqat bilim, ko'nikma, malakani tushunamiz, balki insonning amaliy tajribasi qadriyatlarini ham tushunamiz. Shaxs tavsifiy mohiyatini tashkil etuvchi kompetentlikning asosi – sifat tavsiflari bilan chegaralanib qolmaydi.

«Miqdoriy» amaliyotlari bilan sifat xususiyatlarini belgilab olish qiyin masaladir. Qadimgi faylasuflar ob'ektlarning fazoviy-geometrik xususiyatlarini miqdoriy xususiyatlar bilan tenglashtirganlar. O'lchanadigan parametrlarni absolyutaniqlanishi boshi berk ko'chaga olib kelganligi sababli, tez orada mazkur g'oya cheklanganligi aniqlandi. Xuddi shu narsa zamonaviy pedagogika fanida ham sodir bo'ldi, ya'ni «miqdoriy» yondashuvning noto'g'ri ekanligi, ta'limning sifat xususiyatlari ustida yetarli darajada tadqiqot ishlarini olib borilishigasabab bo'ldi.

YuNESKO tomonidan tayyorlangan akkreditatsiyalangan atamalar Glossariysida ko'rib chiqilayotgan tushunchaning quyidagi: minimal ta'lim standartlarining kafolatlangan amalga oshirilishi; turli kontekstlarda maqsadlarni belgilash va ularga kirish ko'rsatkichlari hamda kontekstli o'zgaruvchilar yordamida erishish; asosiy va bilvosita iste'molchilar va manfaatdor tomonlarning talablari va kutilganlarini qondirishga tayyorlik; takomillashtirishga intilish xususiyatlari ta'kidlangan [2].

Ta'lim sifati davlat ta'lim standartlari malaka talablariga mos kelish - birinchi va ikkinchi holatda ham shu nuqtai nazardan tushuniladi. Hosil qilingan yondashuvdaturli manfaatdor tomonlarni talab ka kutilmalarini aks ettiruvchi standart bu normadir. Ta'lim shartlariga mos tarzda jarayoniy yondashuvlar talablarni aniqlaydi.

Davlat va jamiyatdagi ta'lim jarayonlarining samaradorligi va uni aks ettiruvchi holatlar, ijtimoiy tushunchalar nuqtai nazaridan ta'lim sifatini aniqlaydi. Turli ijtimoiy guruhlarning shaxs, fuqarolik va kasbiy kompetensiyalari, maqsad va vazifalarini shakllanishi hamda rivojlanishida ularni quyidagi tarzda: ta'lim mazmuni, shakl va metodlari, moddiy-texnik bazasi, kadrlar bilan ta'minlanganligi kabi ifodalash[8].

Turli ta'limiy xizmatlar kutilmalariga mos tarzda ta'lim sifati tushunchasining mazmun-mohiyati me'yorlarga adekvatligini belgilaydi. Bunda ta'lim sifati individual qobiliyatlarni shakllanganligi orqali baholanadi, boshqacha aytadigan bo'lsak, sifatning - natija maqsadiga mos kelishi. Ta'lim sifati ikkita yondashuvda baholanadi: ta'limiy xizmatlarni amalga oshirilishiga ko'ra hamda tayyor mahsulotning tavsifini aniqlash taklif etiladi.

Yuqoridagi ta'rifdan ta'lim sifati tushunchasining mazmun-mohiyati ko'rsatiladigan turli ta'lim xizmatlaridan foydalanuvchilarga, xususan, davlat, jamiyat va unda hayotiy faoliyatini amalga oshirayotgan insonlarning orzu-umidlariga, sifat normasiga, modelga mos tarzda belgilanadi. Shu bilan birga, ta'lim shaxs sifatining qobiliyatli shakllanganligi orqali, ya'ni maqsadning natijaga mos kelishi orqali baxolanadi. Ta'lim sifati mazkur baxolashning ikki yondashuvi asosida: ta'lim xizmatlarini amalga oshirish yuzasidan sifatli shakllanishi; tayyorlangan mahsulotlarning sifat xususiyatlari orqali aniqlanadi.

Natija va maqsadning o'zaro uyg'unligida sifat aniqlanadigan bo'lsa, u holda uni modellashtirish mumkin bo'ladi. Mazkur holat ta'lim sifatining turlicha bo'lishligidan darak beradi, bu esa oldinga qo'yilgan maqsadlarga bog'liqdir.

Hosil qilingan natija ularga aniq mos kelsa, u holda talab etilayotgan sifat darajasi haqida fikr yuritish mumkin. Bu esa, turli maqsadlarga turli ta'lim sifatining darajalari mos kelishini bildiradi.

Ta'lim sifatini o'quv jarayoni natijalari nuqtai nazaridan o'rgana turib, ushbu natijalar nimani anglatishini aniqlab olishimiz kerak bo'ladi. Bu savolga javob ko'p variantlidir. O'quv jarayonining natijalari sifatida quyidagilarni ko'rsatishimiz mumkin: bilimlarning shakllanganlik darajasi, ko'nikma darajasi, shaxsning intellektual rivojlanish darajasi, axloqiy fazilatlar, turli faoliyatlarda namoyon bo'ladigan ijodiy munosabat. Bu variantda ta'lim sifati quyidagiga teng: a) o'quvchining to'liq va teran bilimiga; b) bilimlarning umumlashgan va davriylashgan darajasiga; v) ta'lim muammolarini murakkablik darajasi yuqori bo'lgan holda hal qila olish qobiliyatiga. Kompetentlik yondashuvining ommaviyligi ta'lim sifatini bilimlar, qobiliyatlar to'plami bilan emas, balki insondagi asosiy va kasbiy kompetensiyalari bilan shakllantirish kerakligini belgilab berdi.

Taklif etilayotgan ta'lim sifati bilan olinayotgan ta'lim sifati o'rtasida farq ayni vaqtda mavjud emas. Mazkur kontekstda ta'lim sifati tushunchasining mazmunini aniqlashda ob'ektiv va sub'ektiv yondashuvlar haqida o'ylab ko'rish mumkin. Dastlabki shaxsdan tashqari ta'lim xususiyatlarini uning talablarini hisobga olgan holda rasmiy baholash bilan bog'liq. Ta'lim sifatining va ta'lim standartiga mosligiga e'tibor beriladi.

Xalqaro tajriba shuni ko'rsatadiki, sifat boshqaruv tizimini loyihalashtirilishi bir qancha qulay bo'lgan optimal modellarni o'zida namoyon etadi, jumladan:

1. Sifat boshqaruvining Yevropa fondi modeli [6].
2. Sifat boshqaruvi bo'yicha O'zbekiston Respublikasi Vazirlar Mahkamasi huzuridagi ta'lim sifatini nazorat qilish davlat inspeksiyasi modeli [7].
3. Tvente universiteti (Niderlandiya), Oliy ta'lim siyosatini tadqiq qilish markazi (CHEPS) modeli [10];
5. Niderlandiya universitetlari assotsiatsiyasi modeli (VSNU) [5];
6. Belgiya-Niderlandiya modeli (HBO ExpertGroup) [3];
7. Ta'lim sohasida «Baldrige National Quality Award» milliy Amerika mukofotining modeli.
8. Buyuk Britaniya modeli va boshqalar.

Mazkur modellarning barchasi jarayonga yo'naltirilgan yondashuvga asoslanib, korxonalar faoliyatining to'liqligi, teranligi va sifat boshqaruvi tizimi - ta'lim muassasasining umumiy boshqaruv tizimi bilan o'zaro bog'liqligi darajasi bilan farqlanadi. Taxlillar boshqaruv tizimlarining amaldagi modellari o'rtasidagi muvofiqlikni o'rnatishga imkon berdi.

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MODERN APPROACHES TO STUDYING THE ECOLOGICAL CONDITION

Annotation. Today, the geographical and political situation in the world is changing rapidly. In such conditions, the problems of regulating the impact of humans on the biosphere, harmonizing the interaction between social development and maintaining a favorable natural environment, and achieving a balance in the relationship between man and nature are becoming more and more urgent. At the current stage of development, solving a number of problems related to the interaction of man and nature is not limited to only one country. It is clear that many problems related to the protection of the natural environment from the harmful effects of human economic activities are gaining a large scale. The world community is also responsible for any problems and events of high importance in his life.

Kay words: Ecology, environment, ecological problems, «Green Space» anthropogenic, air pollution, factors, climate change.

For reference: In Uzbekistan, in the field of ecology and environmental protection, a number of measures are being implemented to use the natural resource potential of the regions on a scientific basis, to improve the ecological situation in geosystems, and to fight against various geoecological problems. For example, in the 79th goal of the «Development Strategy of New Uzbekistan for 2022-2026»: «Elimination of existing ecological problems that harm the health and gene pool of the population», in the 80th goal «Protection of ecology and environment, improvement of the ecological situation in cities and districts» improvement, implementation of the national project «Green Space» and important tasks such as «...scientifically ensuring the solution of the problem of environmental protection»³ in the «Environmental Protection Concept» of the Republic of Uzbekistan until 2030 specified.

Analysis of literature on the topic. A number of scientists and specialists were engaged in geoecological evaluation of landscapes in the regions, formation and change of landscape-ecological conditions, geoecological problems and emerging negative landscape-ecological problems: among others, Risser Paul G., K. Troll, Yu. Odum, R. Dajo, R. Ricklefs, A.A. Krauklis, Y. Odum, T. Forman, M. Jamagne and others, from CIS scientists V.A. Kovda, N.A. Solntsev, A.G. Isachenko, V.A. Nikolayev, V.M. Chupakhin, G.V. Geldiyeva, A.A. Chibilev, L.G. Ramensky, V.N. Scientific research conducted by Sukachev, V.B. Sochava, F.N. Milkov, I.P. Gerasimov, A.N. Rozanov, V.S. Preobrazhensky, M.A. Pankov, A.M. Ryabchikov, D.L. Armand, L.I. Mukhina and others is of great importance.

In Uzbekistan, L.N. Babushkin and N.A. Kogay, A.A. Rafikov, A. Abdulkasimov, L.A. Alibekov, P. Baratov, S. I. Abdullayev, Sh. S. Zokirov, H. Vakhobov, A. N. Nigmatov, A. K. Urazbayev, S. B. Abbasov, Yu. I. Akhmadaliyev, A. Rakhmatullayev, N.K.Komilova, K.M.Boymirzayev, K.S.Yarashev, Sh.M.Sharipov, A.A.Nazarov, O.M.Koziboyeva, O.T.Mirzamakhmudov in the research works of landscape changes under the influence of active human economic activity, land reclamation, ecological condition, «anthropogenic load», Factors and sources of aggravating environmental situations, soil, water, atmospheric air pollution, ecology and human health issues and other such issues are researched. Assessment of salinity level and ecological-ameliorative conditions of soils in irrigated lands, and their improvement were carried out by Sh.M. Turdimetov, N.Yu.Abdurahmonov, V.Kh.Sherimbetov and others.

Many scientists and specialists were engaged in geoecological problems of the republic, as well as environmental education for students, industrial ecology. A.A.Rafikov, A.Soliyev, T.J.Jumayev, S.Sultonov, A.R.Roziyev, Yu.Shodimetov, A.Abdug'aniyev, A.Tokhtayev, Q.Abirkulov, A.Khojimatov, S.Daniyorov, Sh.Turdikulov from the existence of geoecological problems and natural resources they studied the issues of rational use and measures to prevent environmental problems in a wide range. But the works of the above and other scientists were mainly carried out within the framework of the republic. At the same time, the geoecological problems of the country are not sufficiently studied due to local conditions. In this regard, the work of the public in studying geoecological problems of the country and eliminating existing problems is of scientific and practical importance.

Atmospheric air pollution is mainly caused by carbon, nitrogen, sulfur oxides and dust, as well as by heavy metals, as well as the effects on the properties of vegetation, especially ornamental trees, the identification of harmful chemical elements in the waste toxic substances and scientific research aimed at reducing them is conducted by the world's leading scientific centers and higher education institutions, including the University of Birmingham (Britain), Fukui Prefectural University (Japan), Central South University (China), University of Maryland (USA), Yonsei It is being implemented at the University of Seoul (Korea). In the CIS countries, extensive research has been carried out to study the importance of ornamental trees in reducing the release of harmful substances from industrial enterprises and motor vehicles into the environment and the impact on living organisms (Polinskaya et al., 1979; Siganyok, 1988; Pakalov, 1994; Silveira, 2005; Shilin, 2011; Roshupkin, 2011 et al.).

Through research on the atmospheric air of specialists, the density and type of traffic in the city, pollution with harmful substances related to fuel types, the spread of gas fumes, testing several types of ornamental trees, and studying them at the level of regional and global research. made important contributions (A Alfani, 2000; Shrawan Singh, 2007; Qiushuang Li, 2011; Alexander Afanasev,

2017; et al.). Musin R.I., Aliyev R.R., Tolkacheva G.A., Azizova R.G. and a number of other scientists have conducted many studies. Plants in the area of influence of Almalyk TMK and

Almalyk chemical plant were the objects of research. The main phytotoxic components of the atmospheric emissions of these enterprises are sulfur dioxide, hydrogen fluoride, ammonia, which prevent the normal functioning of the photosynthetic apparatus of plants. Scientists of our republic have carried out important work on studying the effect of atmospheric air on fruit and ornamental trees (Norboyev N.N., Zakirov D. Yodgorova D.SH., Ismailkhodzhayev B.SH., I.Samatov I.M., Rakhimova T.U., Samatov I.M. and others). Despite the long-term experience of ecological research in studying the effects of environmental pollutants on plant cover, interest in this topic has not lost its vitality.

D.N. Kashkarov, S.A. Sevyertsov in the development of general ecology; in ecological parasitology V.N. Beklemishev, V.A. Dogel', Ye.N. Pavlovsky; in environmental entomology G.A. Viktorov, A.S. Danilevsky; in the ecology of hydrobionts V.V. Vasnetsov, N.A. Gerbil'sky, K.M. Dyeryugin, L.A. Zenkevich, S.A. Zyernov; in plant ecology I.G. Syerebryakov, Ye.P. Korovin, K.3. Zakirov and other scientists made great contributions. In the field of ecology in Central Asia, D.N. Kashkarov, Ye.P. Korovin, M.G. Popov, K.3. Zokirov, I.I. Granitov, T.3.Zokhidov, A.T.Tolaganov and others carried out great scientific works.

A group of scientists participated in the development of ecological physiology. Drought resistance of plants N.A. Maksimov, Yu.S. Grigor'ev; K. A. Ivanov on the effect of light; ecology of photosynthesis by V.I. Lyubimenko, A.A. Nichiporovich, O. V. Zalensky, V. A. Voznesensky; radiation resistance of plants G.A. Genkel'; cold resistance was studied by I.I. Tumanov and others. Also, services of L.G. Ramensky, A.P. Shennikov were great in the development of ecology. English population ecology scientist Ch. Developed by Elton (1930). He said that it is necessary to move from the study of certain organisms to the study of populations. Because adaptation processes take place at the population level, that is, they are clearly manifested.

S. A. Sevyertsov, S. S. Shvarts, N. P. Naumov, P. A. Viktorov, V. N. Sinskaya, T. A. Rabotnov and A. A. Uranov made a great contribution to the development of population ecology.

Research methodology. In writing this article, the scientific works of foreign and CIS scientists and researchers who carried out their scientific work in various fields of plant development in Uzbekistan were used. Also, the development of the field of ecology, the impact of the environment on living organisms was analyzed by the author.

Analysis and results. Nature is a unique complex system, and man and society are its derivatives. It exists and develops at the expense of nature. Man satisfies his needs at the expense of nature. It receives air, water, food, mineral and fuel raw materials from nature and exerts its influence on nature during its life activity. As a result, new objects alien to nature are created. These are: cities

and villages, plants and factories, roads, mines, reservoirs, agricultural land, etc. Such anthropogenic landscapes, created by human intelligence and work, will not fail to show their influence on the surrounding natural environment. The rapid growth of the population on the earth, the rapid development of science and technology, the uneven distribution of natural resources on the territory of the countries require the maximum possible use of the available natural resources and, in this way, the acceleration of the development of society. As a result, the laws of interaction between nature and man are violated. Violation of these laws will sooner or later lead to an ecological crisis.

Nowadays, the environmental situation in the whole world worries many people alike. Ecological destruction is taking a terrible shape before our eyes. Issues of environmental protection and effective use of available natural resources remain relevant. It has become known that the cause of the current ecological crisis and the one who gets rid of it with his intelligence is Man. Protection of the environment from pollution, economical use of natural resources depends to a large extent on the level of ecological literacy and ecological culture of mankind, regardless of the society in which people live. To solve environmental problems in our republic, increasing the environmental literacy of the population is one of the most important tasks.

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*Narbutayeva Z.M.
trainee teacher
Gulistan State University*

RELEVANCE OF TEACHING FOREIGN LANGUAGES

Abstract. This article talks about the importance of learning a foreign language and its benefits.

Key words. Foreign language, language learning, method, method, innovation, society, pedagogical technology, education.

Learning a language is a difficult process that requires a lot of patience. Today, in our country, attention is being paid to learning foreign languages, especially English. In fact, according to the decision of the Cabinet of Ministers of the Republic of Uzbekistan No. 312 of May 19, 2021 «On measures to effectively organize the popularization of learning foreign languages», the study of English was introduced from the elementary grades. [1;45] According to the needs of the times, many young people are focusing their attention on learning the language quickly and easily. Many new language learners do not know how to learn a foreign language and what methods to use effectively.

One of the important things in human society is language learning. Language, which is a means of communication, can be acquired practically in the family, that is, in the natural environment, among the public, or in a gathering, that is, in classes. Theoretically studied knowledge is knowledge related to language phenomena. Learning foreign languages, especially multilingualism, or more precisely, polyglossia, is important in the era of growing international relations. Currently, many students and pupils are studying three different languages. In the theory of education, they are referred to by their own names. They are: mother tongue, second foreign language and foreign language. We know that everyone's native language is the first language that plays a key role in the development of mental thinking. Certain concepts learned through words in the mother tongue are manifested in the sound and written appearance of words in a foreign language in the process of mastering a second or foreign language. The mother tongue, the second foreign language and the word learned in a foreign language (for example: tree-tree-un arbre-ein Baum) are three in terms of number, but the concept understood from the expression of meaning is the same: «Some meaning» Noda is the most important type of plant for all humanity and nature, for existence in general. Readers and students logically connect the concepts they learn in a foreign language with words in their native language.

A foreign language is the language of a foreign country. Western European languages (French, German, Spanish, English) and languages from Eastern countries (Turkish, Arabic, Urdu, Persian, Japanese, Chinese) are taught in our

republic, and these languages occupy a place in the curriculum of the educational plan.

In the course of the development of pedagogical technologies and their introduction into the educational process, as well as the rapid exchange and improvement of information technologies, opportunities were created for everyone to strengthen their professional training and skills. Bringing advanced pedagogical technologies into the educational process is one of the tasks of the «National Personnel Training Program». Today, innovative pedagogical technologies and interactive methods are widely used in education, especially in teaching foreign languages. The application of innovative pedagogical technologies to foreign language education - orientation of a person according to the demands of society, organization of education based on these demands, formation of a person as a fully mature staff based on the relevance of educational principles and methods, full development of his abilities and opportunities is to create favorable conditions for its manifestation and development. Another characteristic of innovative pedagogical technologies is the priority of the student's activity, the fact that the student is the main figure in the educational process. In the educational process, the correct formation of knowledge, lexical, grammatical, pronunciation concepts, the correct composition of the knowledge system, self-control skills in the student's mind are components of innovative pedagogical technologies. Today, the most effective teaching methods in the educational process, which are guaranteed to achieve the goals set by teachers and pedagogues, form the basis for students to think independently, make independent decisions, solve their problems, and get out of various situations without difficulty. such teaching methods capable of being prepared are the most advanced features of pedagogical technology. Today, with the initiatives of our president, great attention is being paid to language learning in our country. If we look at the above, we will once again be convinced of how important language is in the development of our country.

In order to learn a foreign language fluently in a short period of time, it is noted that using the following methods will not be without benefits:

1. Increase self-confidence.

Don't be afraid if you've decided to learn a foreign language. Believe in your abilities. Do not be afraid to memorize long grammar rules and dictionaries. You can do it.

2. Moving towards a specific goal.

If you determine the purpose of learning a language, it will be easier to master it, that is, someone wants to study well and enter the university, someone wants to get TOEFL, IELTS or CEFR certificates, and someone wants to learn a foreign language and get their wants to develop his career. Of course, set a goal for yourself and go after it.

3. Memorizing dictionaries and grammar rules.

Just as you cannot learn any language without memorizing a dictionary, you cannot reach perfection without grammar rules. They may seem boring, but if you learn them by combining them with different games or enjoyable activities, you will naturally enjoy them.

4. Use of various language teaching programs and sites.

Currently, there are various language teaching sites and programs on social networks. Examples are Hello Talk, Duolingo, or Teach in 15 languages. If they are used wisely, they will definitely show their results.

5. Repetition.

Abu Rayhan Beruni said, «Knowledge is the fruit of repetition and repetition» After all, if we do not repeat what we have read and memorized, they will not remain in our memory for a long time. By regularly listening to new words in the form of audio, with the help of mobile communication devices and modern gadgets, we can effectively increase vocabulary.

6. Making language learning a hobby.

Language learning is one of the most important areas in human society. Language can be used as a means of communication in a natural environment (in the family, in the community) or in an organized way (in the classroom). Knowledge of language phenomena is studied theoretically. Knowledge of languages, especially multilingualism (polyglossia) is gaining great importance in our time of growing international relations. Learning a language will be easier and more enjoyable if you make it your favorite pastime.

In conclusion, it is worth mentioning that learning foreign languages is a multifaceted research, and in this process, a person becomes even more perfect. For example, experiencing psychological changes, including the process of comparing the mother tongue and a foreign language. Of course, it is necessary to use different teaching methods in this process. The use of different methods is effective as expected and provides intensity in learning a foreign language. This simplifies the process of language learning and gives sufficient results as expected. That is, it opens the door to many conveniences and opportunities for learning and teaching a foreign language. In this way, the intended goal will be achieved more easily, and the above methods will definitely make a significant contribution to it. From this we can understand that the use of methods in teaching and learning a foreign language is quite important.

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*Narzullayev A.M.
Bank moliya akademiyasi magistranti
(O'zsanoatqurilishbank ATB Investitsion loyhalarni
moliyalashtirish markazi direktori o'rinbosari)*

TIJORAT BANKLARIDA KREDIT PORTFELINI BOSHQARISH VA DIVERSIFIKATSIYA QILISH

Annotatsiya. O'zbekiston iqtisodiyotida kreditlarga bo'lgan qiziqish ortib borayotgan bir davrda kredit risklarini tahlil qilish va ularning banklar faoliyati samaradorligidagi rolini o'rganish masalasi yanada dolzarb bo'lib bormoqda. Tadqiqot natijalari kreditlashning asosiy atributlari: kredit hajmi, muddati va foiz stavkasi bilan bog'liq bo'lgan bank kreditlashda risklarning chiziqli bo'lmagan o'sishini ko'rsatadi. Kredit portfelini boshqarishda tavakkalchilikni kamaytiradigan optimallashtirilgan yondashuvni yaratish muhim bo'lib qoladi, bu dolzarb va amaliy ahamiyatga ega masaladir. Ushbu maqolaning maqsadi kredit portfelining xilma-xilligini oshirish va risklarni kamaytirish uchun zaruratni tasdiqlash va yangi kredit portfelini boshqarish tizimini ishlab chiqishdir. Mazkur maqolada O'zbekiston Respublikasi Markaziy banki va Statistika Qo'mitasining statistik ma'lumotlaridan foydalanildi, tizim tahlili, boshqaruvning nazariy yondashuvlari, statistik ishlov berish va operatsion tadqiqotlarga murojaat qildi. Maqolada risklarni baholashning raqamli va sifat usullarini birlashtirgan kredit portfelini boshqarish usuli taqdim etilgan, bu sizga portfelni nazorat qilish, shuningdek, belgilangan xavf chegaralari asosida kredit berish yoki rad etish bo'yicha asosli qarorlar qabul qilish imkonini beradi. Shuningdek, turli kredit siyosatlarini doirasida qisqa muddatli va uzoq muddatli kreditlar o'rtasida yaxshiroq muvozanatga erishish va kredit riskini hisobga olgan holda portfel rentabelligini maksimal darajada oshirish imkonini beruvchi portfel tuzilmasini optimallashtirish modeli ham ishlab chiqilgan. Taklif etilayotgan boshqaruv mexanizmi va modelini banklar faoliyatida qo'llash kredit tashkilotlarining rentabelligi va raqobatbardoshligini oshirishda ijobiy natijalar berdi.

Kalit so'zlar: kredit risklari, kredit risklarini boshqarish, kredit portfelini optimallashtirish, diversifikatsiya.

*Narzullayev A.M.
Master of the Academy of banking finance
Uzsanoatqurilishbank ATB investment settlements
deputy director of the financing center*

MANAGEMENT AND DIVERSIFICATION OF THE LOAN PORTFOLIO IN COMMERCIAL BANKS

Abstract. At a time when the interest in loans is increasing in the economy of Uzbekistan, the issue of analyzing credit risks and studying their role in the efficiency of banks is becoming more urgent. The results of the research show a non-linear growth of risks in bank lending related to the main attributes of lending: loan volume, term and interest rate. Creating an optimized risk-reducing approach to loan portfolio management is an urgent and practical issue. The purpose of this article is to confirm the need to increase the diversity of the loan portfolio and reduce risks, and to develop a new loan portfolio management system. This article used the statistical data of the Central Bank of the Republic of Uzbekistan and the Statistics Committee, referred to system analysis, theoretical approaches to management, statistical processing and operational research. The article presents a loan portfolio management method that combines quantitative and qualitative methods of risk assessment, which allows you to control the portfolio, as well as make informed decisions on granting or denying credit based on established risk limits. A portfolio structure optimization model has also been developed to achieve a better balance between short-term and long-term loans under different credit policies and to maximize portfolio profitability taking credit risk into account. The application of the proposed management mechanism and model in the activity of banks gave positive results in increasing the profitability and competitiveness of credit organizations.

Keywords: credit risks, credit risk management, credit portfolio optimization, diversification.

Kirish.

Bugungi kunda bank kreditlash sektori kredit resurslariga bo'lgan talabning barqaror o'sishi bilan bir vaqtda bankning kredit portfelidagi muddati o'tgan qarzar ulushini oshirish bilan tavsiflanadi. Kredit operatsiyalari bank faoliyatining asosiy yo'nalishlaridan biri bo'lib, uning daromadlari tarkibida salmoqli o'rinni egallaydi. Banklarning ishonchliligi va moliyaviy barqarorligi kredit portfelining tarkibi va tuzilishiga, shuningdek, to'g'ri boshqaruv jarayoniga bog'liq. Shu munosabat bilan kredit portfelining kredit tavakkalchilik darajasi bilan bevosita bog'liq bo'lgan sifatli tuzilmasini shakllantirish har qanday bank uchun ustuvor vazifa hisoblanadi. Har qanday kredit tashkilotining maqsadi raqobatbardoshligini oshirishdir. Bankning kreditlash faoliyati samaradorligini ta'minlash uchun ushbu hujjatda kredit portfelini diversifikatsiya qilish asosida uning sifatini boshqarishning yangi mexanizmi va modelini joriy etish taklif etiladi. Maqolada O'zbekiston Respublikasida kreditlashni rivojlantirish uchun makroiqtisodiy sharoitlarning statistik tahlili keltirilgan va banklarning kredit portfelining dinamikasi va tuzilishi keltirilgan. Aniqlanishicha, 2019 yilning yanvar oyi holatiga ko'ra jismoniy va yuridik shaxslarning kredit resurslariga bo'lgan ehtiyoji sezilarli darajada oshgan. O'sish ipoteka krediti, avtomobil krediti va real investitsiyalar uchun kreditlashda namoyon bo'ladi. Shu bilan birga, salbiy tomoni - muddati o'tgan kreditlarning ko'payishi. Kreditlashda risk

komponentining bunday ortishi banklar rentabelligiga salbiy ta'sir ko'rsatmoqda. Majburiyatlarni to'lamaslik bilan bog'liq kredit risklarini kamaytirishning mumkin bo'lgan usullaridan biri kredit portfelini to'lovlar muddatiga qarab diversifikatsiya qilish va kredit portfelining tavakkalchilik nuqtai nazaridan eng maqbul tuzilishini ta'minlashdir. Bank kredit portfelining sifatini boshqarish mexanizmi ishlab chiqilgan bo'lib, u sifat va miqdoriy ko'rsatkichlardan foydalanishga asoslangan, mijozlar bazasining doimiy skoringini ta'minlaydi, uni kredit tarixining bir hilligiga ko'ra tuzilishga imkon beradi, shuningdek, kredit portfelining bir xilligini ta'minlaydi. xavf omillarining maqbul qiymatlariga muvofiq kredit arizasini tasdiqlash yoki rad etish bo'yicha boshqaruv qarorlarini qo'llab-quvvatlash. Qaror qabul qiluvchining riskga moyilligining turli qiymatlari bo'yicha risk/daromad mezoniga muvofiq kredit portfelining optimal tuzilishini shakllantirish uchun kredit portfelini diversifikatsiya qilish modeli taklif etiladi.

Har qanday moliyaviy tashkilotning kredit portfelini shakllantirish va boshqarish joriy bozor kon'yunkturasini, iste'molchi talabini tahlil qilish va kredit portfelini baholashga asoslanishi kerak. Iste'mol talabining qisqarishiga Markaziy bankning inflyatsiyani jilovlashga qaratilgan pul-kredit siyosati ta'sir ko'rsatdi. O'zbekiston Respublikasi Markaziy banki [1] ma'lumotlariga ko'ra (1-jadval), 2017 yilda bank sektori aktivlari 3,5% ga kamaydi, lekin 2018 yil boshida ular tuzatildi va 6,4% ga oshdi. Yengil o'sish aktivlar aholiga kredit berishning jonlanishiga yordam berdi. Jismoniy shaxslarga berilgan kreditlar hajmi oshdi: 2018 yil boshiga kelib u 12,7 foizga o'sdi, 2019-yil 1-yanvar holatiga ko'ra o'sish 22,4 foizni tashkil etdi. Yuridik va jismoniy shaxslardan jalb qilingan mablag'lar hajmi yillik hisobda birmuncha o'sdi va 2018 yil boshiga kelib mos ravishda 2,1 va 7,4 foizni, 2019 yil boshiga esa 12,7 va 9,5 foizni tashkil etdi, bu esa ushbu guruhlar uchun kredit stavkalaridan sezilarli darajada past. 2018 yil 1 yanvar holatiga aktivlar hajmi banklar nominal 6,4% ga oshdi.

1-jadval. Bank sektori ko'rsatkichlarining o'sish sur'ati (oldingi 12 oy uchun %, hisobot sanasidan)

Sana	Aktivlar	Shaxsiy mablag'lari (Kapital)	Nomoliyaviy tashkilotlarga kreditlar	Jismoniy shaxslarga kreditlar	Jismoniy shaxslarning jamg'armalari	Nomoliyaviy tashkilotlar hisobidagi depozitlar
01.01.2015	35.2	12.2	31.3	13.8	9.4	38.6
01.01.2016	6.9	13.6	12.7	-5.7	25.2	15.6
01.01.2017	-3.5	4.2	-9.5	1.1	4.2	-10.1
01.01.2018	6.4	0.1	0.2	12.7	7.4	2.1
01.01.2019	10.4	-	10.5	22.4	9.5	12.7

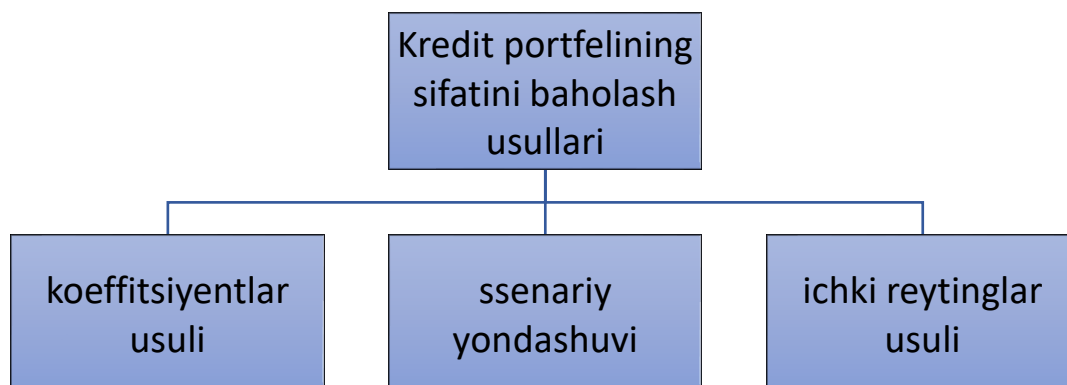
Xususi kredit portfelining o'sish sur'ati 4-chorakda real ko'rinishda 2016 yil 3-chorakga nisbatan ikki baravar sekinlashdi (0,8% ga nisbatan 1,5%). 2016 va 2017 yillarda bozor uchun asosiy yordam. ipoteka krediti taqdim etildi. 2017 yil oxirida uning o'sishi 11,7 foizni tashkil etgan bo'lsa, 2018 yil boshida o'sish sur'ati 9,8% gacha pasaygan, ipoteka kreditlash hajmi 2018 yil davomida

o'zgarmadi. Iqtisodiyotda foiz stavkalarining pasayishiga davlat subsidiyalari dasturi sezilarli ta'sir ko'rsatdi. Bu, birinchi navbatda, ushbu davrda jismoniy shaxslarni kreditlash hajmining sezilarli o'sishi bilan bog'liq. Bunday sharoitda bank sektori uchun muammoni hal qilishning ahamiyati va kredit portfelini operativ baholash va sifatini boshqarishga ehtiyoji ortib bormoqda.

Kredit portfeli deganda bank tomonidan berilgan kreditlarning sifat me'yorlariga ko'ra tuzilgan jamlanmasi tushuniladi, u bank va mijozlari o'rtasidagi ijtimoiy-iqtisodiy va pul-kredit munosabatlarini aks ettiradi hamda ssuda qarzdorligining qaytarilishini ta'minlaydi. Kredit portfelining sifati uning tuzilma xususiyatini belgilaydi, u esa kredit tavakkalchiligi va balans likvidligi maqbul darajasida eng yuqori daromadlilikni ta'minlaydi.

Kredit portfeli va uning sifati ikki subyekt — regulyator va kredit tashkiloti tomonidan nazorat qilinadi. Regulyator (Markaziy Banki)ning boshqaruv usullari rezervlar normalariga rioya qilishga, kredit tavakkalchiligi darajasiga qo'yilgan normativlarga rioya qilishga qaratilgan va normativ hujjatlarda belgilangan. Kredit tashkiloti darajasida kredit portfelining sifati quyidagi yondashuv va usullar bilan baholanadi (1-rasm):

1-rasm. Kredit tashkiloti darajasida kredit portfelining sifatini baholash usullari



- koeffitsiyentlar usuli [4—7], 20 ta moliyaviy ko'rsatkichlar tizimiga asoslangan bo'lib, u daromadlilik, likvidlik va kredit tavakkalchiligini baholashda qo'llaniladi, kredit portfelining sifatini tavsiflaydi;

- ssenariy yondashuvi (yoki stress-testlash) [8—1], kredit portfelining holati va tuzilmasining turli ssenariylarini modellashtirishga qaratilgan. Bankning tavakkalchilik omillariga nisbatan sezgirligi tahlil qilinadi. Stress-testlash natijasi tavakkalchilikka ta'sir etuvchi muhim omillarni aniqlash va tavakkalchilik hodisalari sodir bo'lishining natijasida ehtimoliy yo'qotishlarni baholashdan iborat;

- ichki reytinglar usuli [2—6], Bazel qo'mitasi standartlariga muvofiq ishlab chiqilgan va qarz oluvchining kredit tavakkalchiligi hamda moliyaviy instrumentning kredit tavakkalchiligini hisobga olishga mo'ljallangan. Natijada qarz oluvchiga muayyan reyting berish, qarz oluvchining tavakkalchilik darajasini aniqlash, bu esa muayyan qarz oluvchi bilan munosabatlarning adekvat tizimini qurish (uning reytingiga muvofiq) va kredit berish shartlarini o'rnatish imkonini beradi.

Keltirilgan usullar klassifikatsiyasidan ko'rinib turibdiki, kredit portfelining sifatini tahlil qilishda asosiy nuqtalardan biri portfelning kredit tavakkalchiligini adekvat baholashdir. Shuning uchun tavakkalchilik choralarini asoslash katta ilmiy ahamiyatga ega bo'ladi [7, 8].

Qaror qabul qilish nazariyasida noaniqliklarni tavsiflash uchun eng ko'p ehtimollik-statistik usullar (avvalo sonli bo'lmagan ma'lumotlar statistikasi usullari, jumladan, intervalli statistika va intervalli matematika usullari) qo'llaniladi [9].

Shuningdek, noaniq to'plamlar nazariyasi usullari va ziddiyatlar nazariyasi usullari ham foydali hisoblanadi. Tavakkalchilikni baholash uchun matematik asboblardan odatda dasturiy mahsulotlar shaklida amalga oshiriladigan imitatsion va ekonometriya modellarda qo'llaniladi. Tavakkalchilikni baholash bir qator usullarga asoslanadi, ularning tanlovi tavakkalchilikning tabiati va uni tashkil etuvchi omillar bilan bog'liq.

Ikkita usul guruhi keng qo'llaniladi: empirik ma'lumotlardan foydalanishga asoslangan statistik usullar va mutaxassislar fikri va intuitsiyasiga tayanuvchi ekspert usullari.

Statistik usullarda, agar tavakkalchilik bilan bog'liq bo'lgan zarar miqdori taqsimot funksiyasi bilan tavsiflanadigan bo'lsa, uning matematik kutilmasi, medianasi va kvantilari, dispersiyasi, o'rtacha kvadratik og'ish, variatsiya koeffitsienti, matematik kutilma va o'rtacha kvadratik og'ishning chiziqli kombinatsiyasi kabi xususiyatlari ko'rib chiqiladi (masalan, an'anaviy ishonch oralig'i uchta sigma qoidasi bo'yicha baholanadi — matematik kutilish plus-minus uch sigma), yo'qotish funksiyasining matematik kutilishi.

Bu holda zararni baholash vazifasi bir yoki bir nechta sanab o'tilgan xususiyatlarni baholash vazifasi sifatida tushuniladi. Ko'pincha bunday baholashni amaliy ma'lumotlarga asoslanib — oldin sodir bo'lgan shunga o'xshash holatlarga mos keladigan zarar miqdorlari tanlanmasi bo'yicha amalga oshiriladi. Agar amaliy material mavjud bo'lmasa, ekspert baholariga tayaniladi.

Agar noaniqlik ehtimoliy xarakterga ega bo'lsa va yo'qotishlar tasodifiy miqdor bilan tavsiflangan bo'lsa, unda xavfni minimallashtirish xavfli vaziyat yuzaga kelganda yo'qotishlarning matematik kutilmasini minimallashtirishni, yo'qotishlarning ularning o'rtacha kutilgan miqdoridan o'rtacha kvadratik og'ishini minimallashtirishni, matematik kutilma va o'rtacha kvadratik og'ishning chiziqli kombinatsiyasini minimallashtirishni, foyda funksiyasining matematik kutilmasini maksimal qilishni va hokazolarni o'z ichiga olishi mumkin.

Hozirgi kunda keng tarqalgan xavf o'lchovlaridan biri bu aktivning xavf qiymati (value-at-risk, VaR) bo'lib, u ilk bor 1994 yilda J. P. Morgan kompaniyasi tomonidan qo'llanilgan va Bazel bank nazorati qo'mitasi tomonidan qo'llanilishi tavsiya etilgan [1]. VaR kompaniya berilgan ehtimollik bilan olishi mumkin bo'lgan maksimal yo'qotishlarni belgilaydi. Uning katta mashhurligiga qaramay, ushbu o'lchov bir qator kamchiliklarga ega — kichik ehtimollikka ega bo'lgan katta yo'qotishlarni hisobga olmaydi. S. Uryasev [2] shartli xavf qiymati (conditional value-at-risk, CVaR) o'lchovini taklif qildi, bu esa VaRdan kichik bo'lgan daromadlarning matematik kutilmasini belgilaydi. Ushbu xavf o'lchovi kutilgan daromad taqsimoti og'ir dumi bo'lgan holatlarda xavfni ko'proq adekvat baholaydi. Hozirgi vaqtda kvantil xavf o'lchovlari, daraja o'lchovlari va turli indeksni birlashtirgan o'lchovsiz (indeksli) xavf o'lchovlarini ishlab chiqish bo'yicha ishlar olib borilmoqda [7, 2].

Mos boshqaruv parametrlar majmuasi yordamida tasvirlangan ko'plab ruxsat etilgan boshqaruv ta'sirlarini ajratish mumkin. Keyin, maqsadga erishish darajasini aniqlaydigan xavf xususiyatlariga ta'sir qilish imkoniyati boshqaruv parametrining qiymatini tanlash sifatida rasmiylashtiriladi. Bunda boshqaruv parametri raqam, vektor, cheklangan majmuaning elementi yoki murakkab matematik tabiatga ega bo'lishi mumkin. Asosiy muammo xavfni boshqarish maqsadini to'g'ri belgilashdir. Xavfning turli xususiyatlari spektri mavjud bo'lgani uchun, xavfni boshqarish optimallashtirish ko'p kriteriyali optimallashtirish vazifasini hal qilishga olib keladi. Masalan, o'rtacha yo'qotish (yo'qotishning matematik kutilmasi) va yo'qotishlarning tarqalishini (yo'qotishning o'rtacha kvadratik og'ishi) bir vaqtning o'zida minimallashtirish vazifasi tabiiy hisoblanadi.

Kredit portfeli sifatini boshqarish usullari, kredit xavfini kamaytirishga qaratilgan, turli va turli yo'nalishli. Ularga quyidagilar kiradi:

- qarz oluvchining kreditga layoqatini baholash va baholash usullarini takomillashtirish;
- kredit qarorini qabul qilish vakolatlarini kredit miqdori va potentsial yo'qotish miqdoriga qarab taqsimlash;
- to'lov intizomini monitoring qilish va muammoli qarz oluvchilar bilan ishlashni tashkil etish;
- shartnoma shartlarida nazarda tutilgan qarz shartlarini himoya qilish (axborot ta'minotini yaxshilash, jarimalar, penya, shartnoma buzilishi, foiz stavkalarining oshishi);

- ichki maxsus tashkiliy tuzilmalar (xavfsizlik xizmati) faoliyatini samaradorligini oshirish;

shuningdek, xavfli voqealar yuz berishining oqibatlariga qaratilgan boshqaruv usullari:

- kredit portfelini diversifikatsiya qilish, kredit sifatining bir yoki bir nechta xususiyatlari bo'yicha xavf konsentratsiyasini kamaytirish maqsadida;

- bir qarz oluvchiga beriladigan kredit miqdorini cheklash.

Ushbu tadqiqotda kredit portfelini diversifikatsiya qilish usuli ko'rib chiqilgan. O'zbekiston tijorat banklarining faoliyatini samarali boshqarishga oid kredit portfeli sifatini boshqarish sohasida qiziqishni oshirgan. Banklar bilan mijozlar orasidagi ishlovlarda yangi vositalar va qarorlar izlash, ularning yuqori sifatini ta'minlash va kredit portfelini boshqarishda samarali ishlashga oidning umumiy o'rganishini talab qilgan.

Amaliy faoliyatda kredit tashkilotlarining kreditlar qaytarilmaganligi xavfi o'sayotgan sharoitlarida kreditlar xavflarini kamaytirishga qaratilgan usullar va yo'nalishlarni tahlil qilib chiqilgan, kredit xavflarini pastga solishga qaratilgan yondashuvlar va usullar tizimli o'rganilgan. Ko'rsatilganidek, kredit portfelining xavflarini pastga solish uchun, banklarga faqatgina Rossiya Banki tomonidan qo'llaniladigan tartibga solingan normalar kuzatilmasi kerak emas, balki kredit oluvchilarning va kredit portfelinining umumiy skoringini etib borish lozim.

Kredit xavflarini boshqarishda taklif etilgan uslubning yangiliklari shundayki: birinchi, uning kredit portfelini shakllantirishga qaror qabul qilishni qo'llab-quvvatlash imkonini beradi, kreditlar muddati boyicha, qabul qilingan shaxsning xavfga qarshi ko'paytmasi bilan aniqlangan kredit xavfining maqbul darajasi bilan mos keladigan; ikkinchisi, uning qo'llanilishi kredit portfelining maksimal daromadini ta'minlashga yordam beradi va bankni moliyaviy xizmatlar bozorida raqobatlik afzalliklarini oshiradi. Taklif etilgan uslubning asosiy tushunchalarining samaradorligi va ma'lumotlar asosida ko'rsatilgan nazoratli banklardan birining amaliyoti haqida olingan ma'lumotlar bilan tasdiqlangan. Natijalar haqiqiylikka muvofiq sabablarga asoslanib, olingan natijalar xavfsizligini tasdiqlangan.

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*Navotova D.I.
o'qituvchi
Qarshi davlat universiteti
Toshtemirova R.N.
2-kurs, talaba
Qarshi davlat universiteti*

QASHQADARYO VILOYATI IQTISODIY KO'RSATKICHLARI TAHLILI

Annotatsiya. Tarixiy taraqqiyotning turli bosqichlarida Qashqadaryo viloyati xo'jaligi tarmoqlari, uning iqtisodiy rivojlanish darajasi murakkab yo'lni bosib o'tgan. Tarixiy manbalarda berilgan ma'lumotlarga ko'ra, Qashqadaryo o'tmishda mamlakatdagi aholi xo'jalik faoliyati g'oyat qizg'in kechgan eng qadimiy o'lkalardan biri bo'lgan. Mamlakatimizning g'arb bilan sharq o'rtasidagi iqtisodiy taraqqiyot uchun qulay bo'lgan geografik o'rni, sahiy tabiati, boy va rang-barang tabiat resurslari, mehnat va mardona xalqi umumbashariy taraqqiyotga munosib hissa qo'shaolgan hudud hisoblanadi. Ushbu maqolada Qashqadaryo viloyati iqtisodiyoti haqida ma'lumot berilgan.

Kalit so'zlar: Iqtisodiyot, sanoat uzeli, mehnat resurslari, migratsiya, aholi bandligi, infratuzilma, ijtimoiy soha, diversifikasiya, sanoat ishlab chiqarish, xizmat doirasi.

*Navotova D.I.
teacher
Karshi State University
Toshtemirova R.N.
2nd year student
Karshi State University*

ANALYSIS OF ECONOMIC INDICATORS OF KASHKADARYA REGION

Abstract. At different stages of the historical development of the economic sector of the Kashkadarya region, its level of economic development has passed a difficult path. According to information given in historical sources, Kashkadarya was one of the oldest regions of the country, where in the past the economic activity of the population was very intense. Our country's favorable geographical position for economic development between the West and the East, its generous nature, rich and varied natural resources, hardworking and courageous people are considered a region that has made a worthy contribution to world development. This article provides information about the economy of the Kashkadarya region.

Key words: Economy, industrial hub, labor resources, migration, employment, infrastructure, social sphere, diversification, industrial production, service sector.

Qashqadaryo – mamlakat neft va gaz sanoatining tayanchi hisoblanadi. Qashqadaryo viloyatida 150 ga yaqin sanoat korxonasi faoliyat yuritmoqda. Ularning asosiy qismi neft va gaz, paxta tozalash, binokorlik, yengil hamda oziq-ovqat sanoatiga ixtisoslashgan.

Eng yirik korxonalari: «Muborakneftgaz» unitar korxonasi, Shoʻrtan gaz unitar korxonasi, Muborak gazni qayta ishlash zavodi, Shoʻrtan gaz kimyo majmuasi, Qarshi, Koson yogʻ ekstraksiya, Shahrisabz konserva zavodlari, Shahrisabz pillakashlik, Qarshi tikuvchilik fabrikalari, Qashqadaryo marmar aksiyadorlik jamiyati va boshqalar 49 qoʻshma korxonalar faoliyat koʻrsatadi, shulardan: Oʻzbekiston – Turkiya «Kashteks» toʻqimachilik, «Oqsaroy toʻqimachilik LTD» qoʻshma korxonalari ishlamoqda.

Shoʻrtan gaz-kimyo majmuasi — Oʻzbekistondagi eng yirik gaz sanoati korxonalaridan biri. «Oʻzbekneftgaz» milliy xolding kompaniyasi tarkibiga kiruvchi unitar shoʻba korxonalar. Qashqadaryo viloyatining Gʻuzor tumanidagi Shoʻrtan shaharchasida joylashgan boʻlib, 150 ga dan ortiq maydonni egallaydi.

Mahalliy konlardan olinadigan gazni qayta ishlab, organik sintez, polietilen, yoqilgʻi gazi, suyultirilgan gaz, gaz kondensati, donador oltingugurt, polietilen tagliklar, polietilen plyonkalar ishlab chiqaradi. Qarshi choʻlining janubi gʻarbiy qismida vodorod sulfatidan gaz ajratib oladigan ulkan gaz sanoati markazi joylashgan.

Iqtisodiy tadqiqotlar va islohotlar markazi Qashqadaryo filiali tomonidan viloyatning 2022 yil yanvar-dekabr oylaridagi asosiy makroiqtisodiy koʻrsatkichlari tahlil qilindi. Viloyatda yaratilgan YaHMning Respublika yalpi ichki mahsulotidagi ulushi 5,6 % boʻlgan holda Toshkent shahri, Toshkent, Navoiy, Samarqand, Fargʻona, Andijon viloyatlaridan keyingi 7-oʻrinni egallagan. YaHM da kichik biznes va xususiy tadbirkorlikning ulushi 69,9%ni tashkil qilgan.

Viloyatda 22 814,7 mlrd soʻmlik sanoat mahsulotlari ishlab chiqarilgan boʻlib, oʻtgan yilning mos davriga nisbatan 10,5 foiz (oʻsish koʻrsatkichi boʻyicha Respublika hududlari orasida 3-oʻrin) ga oshgan. Viloyatda ishlab chiqarilgan sanoat mahsulotlarining respublika sanoatidagi ulushi 4,1 foizni va hududlar orasida 8-oʻrinni egallagan. Shuningdek, viloyat sanoati tarkibida togʻ-kon sanoatining ulushi – 7,5 %, ishlab chiqariladigan sanoat - 68,2%, elektr, gaz, bugʻ bilan taʼminlash va havoni konditsiyalash sanoati - 23,8 %, suv bilan taʼminlash, kanalizatsiya tizimi, chiqindilarni yigʻish va utilizatsiya qilish sanoati - 0,5 %ni tashkil qilgan. Jon boshiga toʻgʻri keladigan sanoat mahsulotlari hajmi 1 376,7 ming soʻm (*Respublika hududlari orasida 12-oʻrin*) boʻlgan holda oʻtgan yilning mos davriga nisbatan 102,5 foizga oshgan.

Viloyatda 4 763,1 mlrd soʻmlik (2021 yilning mos davriga nisbatan 9,0%) isteʼmol tovarlari ishlab chiqarilgan boʻlib, respublikadagi ulushi 2,4 foizni tashkil qilgan holda hududlar orasida 11-oʻrinni egallagan. Tahlil qilinayotgan davr mobaynida ishlab chiqarilgan oziq-ovqat tovarlari hajmi 2878,6 mlrd soʻm (oʻsish koʻrsatkichi 108,3%), nooziq-ovqat tovarlari 1884,5 mlrd soʻmni (110,2%) tashkil qilgan.

Qishloq, oʻrmon va baliqchilik xoʻjaligida 33 384,6 mlrd soʻmlik mahsulotlari ishlab chiqarilgan boʻlib, oʻtgan yilning mos davriga nisbatan 103,7% ga oshgan. Respublika qishloq xoʻjaligida viloyatning ulushi 9,2% boʻlgan holda, hududlar orasida 5-oʻrinni egallagan. Jon boshiga toʻgʻri keluvchi qishloq xoʻjaligi mahsulotlari hajmi 9 689,4 ming soʻmni tashkil qilgan.

Xizmat koʻrsatish sohasida koʻrsatilgan bozor xizmatlari hajmi 15 945,8 mlrd soʻm boʻlgan holda, 114,1% ga oshgan. Xizmatlar hajmining respublika koʻrsatkichidagi ulushi 4,5% boʻlib, hududlar orasida 7-oʻrinni egallagan. Jon boshiga toʻgʻri keladigan xizmatlar hajmi esa 4 628 ming soʻmni tashkil qilgan.

Chakana savdo hajmi 20 504,8 mlrd. soʻm (112,5%), respublikadagi ulushi 6,4% ni boʻlgan holda, hududlar orasida 6-oʻrinni egallagan. Jon boshiga toʻgʻri keluvchi chakana savdo hajmi 5 951,2 ming soʻm (hududlar orasida 12-oʻrin) ni tashkil etib, oʻtgan yilning mos davriga nisbatan 110,1 foizga oshgan.

Qurilish ishlari hajmi 7 831,1 mlrd. soʻmni (oʻtgan yilning mos davriga nisbatan 105,8%), respublikadagi ulushi 6,0%ni tashkil etib, hududlar orasida 6-oʻrinni egallagan.

Asosiy kapitalga kiritilgan investitsiyalar hajmi 16 181,5 mlrd soʻmni (oʻtgan yilning mos davriga nisbatan 80,8%), respublikadagi ulushi 6,1% (hududlar orasida 6-oʻrin)ni tashkil qilgan. Jon boshiga toʻgʻri keladigan asosiy kapitalga kiritilgan investitsiyalar hajmi 4 696,4 ming soʻmni tashkil qilgan.

Tashqi savdo aylanmasi hajmi 547,5 mln AQSh dollarini tashkil qilgan holda, oʻtgan yilga nisbatan 96,8 foizni tashkil etgan. Viloyat tashqi savdo aylanmasining respublika jami tashqi savdo aylanmasidagi ulushi 1,1% boʻlib, hududlar orasida 13-oʻrinni egallagan. Tashqi savdo aylanmasi tarkibida eksport – 303,4 mln AQSh dollari (112,3% oʻsish) ni, import – 244,1 mln AQSh dollari (82,6%) ga teng boʻlgan. 2022 yilning yanvar-dekabr oylarida viloyatda 8 551 ta (oʻtgan yilga nisbatan 90,4%) yangi kichik biznes subʼyektlari tashkil etilgan.

2024- yilning yanvar-fevral oylarida Qashqadaryo viloyatida jami 852 ta yangi korxonalar (fermer va dehqon xoʻjaliklarisiz) tashkil etilib, ular iqtisodiy faoliyat turlari boʻyicha quyidagicha taqsimlangan:

- ✓ savdo sohasida – 276 ta
- ✓ qishloq, oʻrmon va baliqchilik xoʻjaligi sohasida – 175 ta
- ✓ sanoat sohasida – 125 ta
- ✓ yashash va ovqatlanish boʻyicha xizmatlar sohasida – 64 ta
- ✓ qurilish sohasida – 38 ta
- ✓ axborot va aloqa sohasida – 31 ta
- ✓ tashish va saqlash sohasida – 22 ta

- ✓ sog‘liqni saqlash va ijtimoiy xizmatlar sohasida – 14 ta
- ✓ boshqa sohalarda – 107 tani tashkil etdi.

Qashqadaryo viloyatining ma'muriy, siyosiy, iqtisodiy va madaniy markazi Qarshi shahri hisoblanadi. Qarshi Janubiy O'zbekistonning yirik shahri bo'lib, 1926 yilda tashkil topgan. Shahar maydoni 75,51 km² ni tashkil qiladi. Aholisi 295,6 ming kishi, aholining soni jihatidan respublika shaharlari orasida 8-o'rindadir. Shaharning iqtisodiy geografik o'rni juda qulay. Qarshi shahri viloyatning va o'zlashtirilgan Qarshi dashtining deyarli markazida asosiy temir va avtomobil yo'llari kesishgan yerda, qadimdan dehqonchilik intensiv rivojlangan voha bilan keng yaylovlar Qarshi-Zarafshon, Surxon-Sherobod vodiysi oralig'ida va qulay sanoat uzeldida joylashgan. Ayni vaqtda respublika miqyosidagi ishlab chiqarish kuchlari tez rivojlanayotgan hududda o'rtnashgan. Bugungi Qarshi ko'p funksiyali shahar hisoblanadi. Shahardagi sanoat tarmoqlari tarkibida yengil sanoat va oziq-ovqat sanoati yetakchi o'rin tutadi. Paxta tozalash zavodi, yog'-sut zavodi, tikuv fabrikasi, qurilish materiallari, metallarga ishlov beruvchi kombinatlar viloyat iqtisodiyotining rivojiga munosib ulush qo'shib kelmoqda. Hozirgi vaqtda Qarshi shahrida 20 dan ortiq qo'shma korxonalar faoliyat ko'rsatadi. «Mevalar kamalagi» O'zbekiston-Britaniya, «Qarshiyog'» O'zbekiston-Singapur qo'shma korxonalari mahalliy xomashyoni qayta ishlash yo'li bilan mahsulot ishlab chiqaradi. Qarshi va uning tevaragida paxta, ipak, yog' zavodlari, metal ishlash korxonalari, tikuvchilik fabrikalari, binokorlik materiallari kombinati kabi korxonalar qurilib, Qarshi sanoat tuguniga aylandi. Cho'lni o'zlashtirishda Qarshi tayanch manzil hisoblanadi. Temiryo'l va avtomobil yo'llari Qarshida birlashadi. Bu hol Nishon, Talimarjon, Koson kabi shahar va shaharchalarning ishlab chiqarish aloqalarini rivojlantiradi. Shaharda Qarshi davlat universiteti, Qarshi muhandislik-iqtisodiyot instituti, Toshkent axborot texnologiyalari universitetining Qarshi filiali va boshqa ta'lim muassasalari bor.

Qashqadaryo viloyati ishlab chiqarish kuchlarini yanada rivojlantirish uchun katta moddiy texnika baza, mineral, yer hamda mehnat resurslariga ega. Shu boisdan, Qashqadaryo viloyati O'zbekiston xalq xo'jaligi majmuasi tarkibida muhim iqtisodiy mavqega ega. Mavjud imkoniyatlardan foydalanish kelgusida bu yerda respublika ahamiyatiga ega bo'lgan yirik dehqonchilik sanoati majmuasini vujudga keltirish imkonini beradi. Viloyatning ishlab chiqarish sohasidagi ixtisoslashuvini belgilovchi uch tarmoq majmuasi, paxta-g'allachilik, mevasabzavotchilik va neft-gaz sanoati rivojlantiriladi. Kelajakda viloyatdagi tabiiy va iqtisodiy imkoniyatlar hisobga olingan holda sanoat ancha rivojlantiriladi, sanoat korxonalarini oqilona joylashtirish, mehnat resurslaridan to'laroq foydalanish, xalq xo'jaligini malakali kadrlar bilan ta'minlash kabi vazifalar hal etiladi.

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*Nazarov A.A., doctor of geographical sciences
associate professor
Koriyev M.R., doctor of philosophy in geographical sciences
NamSU
Uzbekistan, Namangan*

THE EFFECT OF CLIMATE CHANGE ON NATURAL GEOGRAPHICAL PROCESSES (FOR THE EXAMPLE OF FERGANA VALLEY)

Abstract. This article describes the specific features of the natural geographical processes occurring in the Fergana Valley. Also, the impact of climate change on the natural geographical processes of the Ferghana Valley has been studied.

Keywords: global climate change, natural geographical processes, environmental protection, natural landscapes, anthropogenic factors.

The geomorphological structure of the Fergana Valley plays a key role in the formation of unique natural processes. The natural processes that have formed and can occur in the Fergana Valley are distinguished by their location, cause, scale, associated material damage and other characteristics. Nowadays, one of the most important tasks is to forecast the occurrence of natural disasters, to warn the public authorities and the population about the impending disaster. Geophysical, geological, hydrogeological, atmospheric and other factors play a key role in the formation of natural disasters in the regions of the Fergana Valley. Earthquakes, landslides, mudslides, floods, and floods occur relatively often in the valley. This, in turn, causes material damage to the national economy to varying degrees, and puts people's lives in danger.

The surface of the Fergana valley rises in steps depending on the height. The central part of the valley, occupying areas with an absolute height of 300-400 m, and the part up to the current valley of the Syrdarya River, is considered the first step, and in this area, mainly there are salt marshes, places of lakes and sand dunes. The regions of the Fergana Valley at an altitude of 400-600 m are the second level, which occupies the expanses of rivers and partly streams. The regions of the relief of the Fergana valley, rising to a height of 600-1200 m, consist of adyrs. This is the third step, rocks, gravel, mud and clay mixed rocks and low elevations are characteristic of the adyrs. The mountains above 1200 m and surrounding the valley form the fourth level. They consist of strongly broken, sloping slopes. This division of the relief causes an increase in the slope.

By the 70s of the 20th century, the hills of the Fergana Valley were developed for the purpose of irrigated agriculture. By organizing the development of viticulture, horticulture and other types of agricultural industries in the hills,

hilly lands with complex topography have begun to be strongly transformed. The adyrs are the main land fund in the valley and are widely used in irrigated agriculture. As a result of such exploitation of hills, non-compliance with agrotechnical rules of irrigation, unique natural and natural-anthropogenic processes are taking place. These include soil erosion, landslides, soil salinization, impoverishment of flora and fauna. Such a situation can be found in the cultivated hills of Kosonsoy, Turakurgan, Chust, Pap, Chartak, Yangikurgan and Uchkurgan, Beshariq, Sokh, Rishtan, Kuva, Markhamat, Asaka, Khujaabad, Kurgantepa, Khonobad districts of the valley. At present, inappropriate and unsatisfactory processes related to irrigation development have intensified in the area of more than 250,000 hectares of the Northern and Southern Fergana adyrs. Also, one of the biggest problems related to irrigation is the rise of groundwater in the lower parts of the mountain slopes (Chartak, Yangikurgan, Kasansay, Beshariq, Rishton, Kuva, Tashlak, etc.), has also led to increased waterlogging and salinization. For example, the exploitation of Chartak adyrs has caused groundwater to escape from residential areas (Fig. 1).



Fig. 1. Consequences of development of Chartak adyrs

Another of the most active and noticeable natural geographical processes in the Fergana Valley is the process of ravine erosion. The process of ravine erosion occurs under the influence of natural, anthropogenic and combined factors. A. Nigmatov and A. Dadakhoyhayev (1995) studied the processes of ravines in the hills of Northern Fergana and their causes.

According to the results of the conducted research, in order to prevent such natural processes, it is necessary to plant trees on the slopes, improve the condition of meadows, open the old floodplains and valley roads, timely repair existing floodplains and it is appropriate to use other hydrological measures. Adyr region

is one of the most influential regions of the valley, and the impact of the activities carried out here is reflected not only in them, but also spreads to the lower regions. Therefore, development and use of hills requires careful attitude.



Fig. 2. Consequences of development of hills (ravine erosion) (adysr of Northern Fergana).

Currently, there are flood-prone areas in the mountainous and sub-mountainous zones of the republic, which is about 46,000 km². In particular, the stepped structure of the Fergana Valley is the basis for the occurrence of floods and landslides. These processes were studied by S.A.Shuvalov (1957), F.K.Kocherga (1962), A.Saidovlar (1971). According to them, floods and floods are formed under the influence of: 1) the structure of the surface layer of the place, 2) relief and geomorphological factors, 3) hydrolithological factors [1, 2, 3]. As a result of heavy rainfall and rapid melting of snow in Kurama, Chotkal, Fergana, Turkestan and Aloy mountain ranges surrounding the Fergana valley, floods often occur in Chartak, Yangikurgan, Kasansay, Turakurgan, Chust, Pap, Sokh, Rishton, Kuvasay, Khonobod, Markhamat districts. Flood events are seasonal in nature. Floods that occur in streams in the foothills and hills increase in early spring. Because in these regions, the amount of rain is high in March-April, and at this time, the soil has a lot of moisture. As a result, a 1.4-1.6 times increase in rainfall causes floods and floods to increase by 1.1 times in March and up to 3 times in April. The magnitude of the terrain slope also causes floods and landslides. For example, as a result of an increase in the amount of precipitation, floods and floods increase 1.5 times in areas with a slope of 10 degrees, and 2.8 times in areas with a slope of 20 degrees [1]. The presence of lakes with natural dams (Kurbankol) in the mountainous regions of the Fergana Valley remains a risk of flooding. In this place, the flood that occurred on the night of July 7-8, 1998 in the village of Shahimardan of Fergana region caused a huge disaster. Due to the sudden warming of the air, the melting of snow accelerated and a large flow of water appeared. This flow joined the Shahimardan stream, increasing its water capacity by 200-300 m³/sec, and as a result of the strong flow, 52 households and

36 recreation centers were damaged. Also, the construction of hydrotechnical structures of various sizes in the Fergana Valley increases the risk of flooding. For example, on May 1, 1979, the flood that occurred as a result of the failure of the Chartak reservoir caused the flooding of agricultural fields and partially residential areas in the district.

Plants is the main factor in reducing the occurrence of flood events. In mountainous and sub-mountainous areas, the abundance of plants increases the infiltration of rainwater into the soil, which reduces the risk of floods and landslides. The lack of plants helps the snow to melt quickly and the rainwater to form a stream without being absorbed into the ground, which increases the risk of floods and landslides. In accordance with this, it is necessary to implement measures such as regulation of the use of mountain slopes as pasture, prevention of cutting down of trees by the population (Table 1.).

Table 1.

The degree of change in the nature of the Fergana valley

Rate of change	Areas	The main problems observed
Weak	Sub-mountainous and mountainous	Erosion, deforestation, permanent change and pollution of the natural environment during the extraction of minerals, landslides, improper use of pastures, vegetation degradation, floods and landslides, mountain collapses, karst phenomena, snow cover 'chkili
Average	Adyrs	Permanent irrigation erosion, floods and landslides, erosion, suffocation, soil salinization and swamping in adirorti plains, vegetation degradation
Strong	The plain	Atmospheric air pollution, groundwater rising, salinization, wind erosion, waterlogging, siltation of collector and drainage networks, pollution of open water bodies, generation of domestic waste are characteristic.

In short, the high anthropogenic pressure on the nature of the Fergana Valley is causing geocological problems. From this point of view, solving the ecological problems arising in the process of using nature, studying them on a scientific basis, and ensuring the stability of its protection are among the urgent issues of today.

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*Nosirov L.N.
Navoiy Davlat Pedagogika instituti
«Musiqqa ta'limi» kafedrası o'qituvchisi*

MUSIQA O'QITUVCHISI VA UNING KASBIY MAHORATI

Annotatsiya. Ushbu maqolada zamonaviy musiqa o'qituvchisi va unga qo'yiladigan talablar, pedagogik texnologiyalarning manbaalari, metodologik asoslari va uning turlari, ta'lim mazmuni va uni o'zlashtirish haqida so'z boradi.

Kalit so'zlar: pedagogika, metodologiya, asos, musiqa, zamonaviy, texnologiya, o'qituvchi, metod, mustaqil, tadqiqot.

*Nosirov L.N.
teacher
«Music Education» department
Navoi State Pedagogical Institute*

MUSIC TEACHER AND HIS PROFESSIONAL SKILLS

Abstract. This article talks about the modern music teacher and his requirements, sources of pedagogical technologies, methodological bases and their types, educational content and its mastery.

Key words: pedagogy, methodology, basis, music, modern, technology, teacher, method, independent, research.

Pedagogik texnologiyaning manbalari, metodologik asoslari va uning turlari va ta'lim mazmunini o'zlashtirishda o'quvchilarning bilim saviyasi, o'zlashtirish qobiliyati, ta'lim manbai, didaktik vazifalariga qarab, munosib ravishda og'zaki, ko'rgazmali va amaliy kabi uch guruhga bo'linadigan metodlarning quyidagi variantlari qo'llaniladi:

- o'qitishning ma'ruza (suhbat) metodi; - o'qitishning amaliy ishlar metodi; - laboratoriya ishlari metodi;
- mustaqil ishlar metodi;
- muammoli-evristik modellashtirish metodi;
- ilmiy-tadqiqot metodlari;
- o'qitishning muammoli-izlanish va reproduktiv metodi;
- o'qitishning induktiv va deduktiv metodi;
- o'qitishning nazorat va o'z-o'zini nazorat qilish metodi.

Yuqoridagilarga asoslangan holda shuni aytish mumkinki, ta'lim muassasalarida yangi pedagogik texnologiyalar, zamonaviy o'qitish uslublaridan foydalanib, jahon talablari darajasida o'quvchi va talabalarni o'qitish mumkin.

Zamonaviy o'qituvchi - kelajak bunyodkori, yangi pedagogik texnologiyalar, nazariyalar, konsepsiyalarning muallifi, ishlab chiqaruvchisi, tadqiqotchisi, foydalanuvchisi va targ'ibotchisidir.

O'qituvchining pedagogik mahorati - o'quv jarayonining barcha shakllarini eng qulay va samarali holatda tashkil etish, ularni shaxs kamoloti maqsadlari tomon yo'naltirish, talaba- o'quvchilarda dunyoqarash qobiliyatini shakllantirish, jamiyat uchun zarur bo'lgan faoliyatga moyillik uyg'otish asosiy vazifalardan hisoblaniladi.

Pedagogik maqsadning o'ziga xosligini quyidagilarda bilish mumkin:

Pedagogik faoliyatning maqsadi jamiyat tomonidan belgilanadi, ya'ni pedagogik faoliyatning natijasi jamiyat manfaatlari bilan bog'liqdir. Uning mehnati yoshlar shaxsini har tomonlama kamol toptirishga yo'naltirilgan. Pedagogik faoliyat avlodning ijtimoiy uzviyligi (ketma-ketligi)ni ta'minlaydi. Bir avlod tajribasini, ikkinchi avlodga o'tkazadi, ijtimoiy tajriba orttirish uchun insondagi tabiiy imkoniyatlarni ro'yobga chiqaradi.

Pedagog faoliyati doimo shaxs faoliyatini boshqarish bilan bog'liq. Bunda pedagogik maqsad o'quvchi maqsadiga aylanishi muhimdir. Pedagog o'z faoliyati maqsadini va unga erishish yo'llarini aniq tasavvur qilishi hamda bu maqsadga erishish o'quvchilar uchun ham ahamiyatli ekanligini ularga anglata olishi zarur. Gyote ta'kidlaganidek: «Ishonch bilan gapir, ana shunda so'z ham, tinglovchilarni mahliyo qilish ham o'z-o'zidan kelaveradi».

Pedagogik ta'lim-tarbiya jarayonida o'quvchi faoliyatini boshqarish shuning uchun ham murakkabki, pedagog maqsadi doimo o'quvchi kelajagi tomon yo'naltirilgan bo'ladi. Buni anglagan holda mohir pedagoglar o'z faoliyatining mantiqini o'quvchilar ehtiyojlariga muvofiq holda loyihalaydilar. Hamkorlik pedagogikasining tub mohiyati ham ana shundan iborat.

Shunday qilib, pedagogik faoliyat maqsadining o'ziga xosligi o'qituvchidan quyidagilarni talab qiladi:

- jamiyatning ijtimoiy vazifalarini to'la anglab, o'z shaxsiga qabul qilishi.

Jamiyat maqsadlarinrng «o'sib», uning pedagogik nuqtai nazariga aylanishi;

- muayyan harakat va vazifalarga ijodiy yondashishi;

- o'quvchilar qiziqishlarini e'tiborga olish, ularni pedagogik faoliyatning belgilangan maqsadlariga aylantirish.

- Pedagogik faoliyatning o'ziga xosligi quyidagilarda namoyon bo'ladi:

Inson o'zining alohida xususiyatlariga ega bo'lgan, ro'y berayotgan voqealarni idrok qila oladigan va ularga o'zicha baho beradigan takrorlanmaydigan faol mavjudotdir. Psixologiyada ta'kidlanganidek, har bir shaxs takrorlanmasdir. U pedagogik jarayonning o'z maqsadi, ishtiyoqi va shaxsiy xulqqa ega bo'lgan ishtirokchisi hamdir. Pedagog doimo o'sib-o'zgarib boradigan inson bilan ishlaydi. Ularga yondashishda bir xil qolip, shakllanib qolgan hatti-harakatlardan foydalanish mumkin emas. Bu esa pedagogdan doimo ijodiy izlanib turishni talab qiladi.

O'quvchilarga pedagogdan tashqari, atrof-muhit, ota-ona, boshqa fan o'qituvchilari, ommaviy axborot vositalari, ijtimoiy hayot ham ta'sir etadi. Shuning uchun ham pedagog mehnati bir vaqtning o'zida jamiki ta'sirlarga va o'quvchilarning o'zida paydo bo'lgan fikrlarga tuzatishlar kiritib borishni nazarda tutadi.

O'quvchi shaxsiga doimo ijobiy-axloqiy ta'sir ko'rsata oladigan kishigina haqiqiy tarbiyachi hisoblanadi. Bunga erishish uchun pedagog o'zining axloqiy sifatlarini doimo takomillashtirib borishi talab etiladi.

O'quvchilarni mehnat, muloqot, o'yin, o'qish kabi faoliyat turlarida ishtirok etishlari tarbiyaning asosiy vositasi hisoblanadi. Har bir mohir pedagog o'zining individual pedagogik tizimiga ega bo'lishi lozim. Bunda albatta mamlakatimizdagi ilm-fan, ta'lim, milliy-madaniy qadriyatlar, hamda musiqiy meros, musiqiy ijrochilik, xonandalikdagi qator yutuqlarimiz bilan o'quvchi-yoshlarni tanishtirib borish katta ahamiyat kasb etadi. U o'quvchi-yoshlar psixologiyasini o'rganishi va har biriga nisbatan individual yondoshishi, dars va mashg'ulot jarayonida ularning talab va istaklari qondirilishi uchun harakat qilishi, yaxshi ijodiy natijaga erishishga, har bir o'quvchi-yoshlarni safarbar eta olishi, bir so'z bilan aytganda, yoshlarning ma'naviy ehtiyojini qondirish uchun sharoit yaratishi lozim. Ushbu vazifalarni amalga oshirishda undan yuqori badiiy did, yangilikni tez his qilish, hayot bilan hamnafas bo'lish, mohir tashkilotchilik qobiliyati talab qilinadi. Bosh vazifa - badiiy ijodiyot yoki san'atning biror tor yo'nalishi bo'yicha mutaxassislar tayyorlash emas, balki, har tomonlama komil insonni tarbiyalash uchun uni axloqiy pok, go'zallik va ezgulikni yaxshi his eta oladigan, o'z axloqi bilan boshqalarga o'rnak bo'la oladigan ma'naviy etuk insonlarni tarbiyalash ishiga ko'maklashishdir.

Musiqqa madaniyati o'quv predmeti umumiy o'rta ta'lim maktablarida o'qitiladigan barcha o'quv predmetlari, jumladan, adabiyot, tasviriy san'at, jismoniy tarbiya, mehnat va boshqa fanlar bilan bog'lanadi. Barcha o'quv fanlari qatori musiqiy ta'limda ham DTSlarning joriy etilishi, milliy musiqiy meroslardan to'la qonli foydalanish imkonini beradi. Bular amaliy xalq kuy va qo'shiqlarida, xonanda va sozandalarning ijodiy faoliyatlarida, maqom, shashmaqom, dostonlar va bugungi zamonaviy musiqqa asarlarida o'z aksini topdi. Musiqqa san'atining bu kabi imkoniyatlari yangi avlodni tarbiyalashda, ularning barkamol bo'lib yetishlarida o'ziga xos va takrorlanmas manbaa bo'lib xizmat qiladi. Azaldan Sharq, jumladan, o'zbek musiqqa ta'lim-tarbiyasi pedagogikasi va uning mukammal ustoz va shogird an'analari misolida takomillashib borgan.

Davlat ta'lim standartlarida ommaviy xalq musiqqa pedagogikasi, professional musiqqa ijodkorlari, musiqqa ijrochilari (sozanda, xonandalar) katta ashulachilar, maqomchilar, dostonchilar tomonidan asarlarning elementar asoslarini o'rganish me'yorlashtirilgan. Musiqqa ta'limida davlat ta'lim Standartlari asosida yangi ta'lim mazmuni o'quvchilarning musiqiy bilim va malakalari bilan birga ularda kuzatuvchanlik, xotirani mustahkamlash, obrazli tassavur qilish, ularda ijodkorlik, mustaqillik, tashabbuskorlik, badiiy va musiqiy

did kabi xislatlarni rivojlantirishni ta'minlaydi. Musiqa madaniyati ta'limining yangi mazmuni yosh avlodni milliy musiqiy merosimizga vorislik qila oladigan, umumbashariy, musiqa boyligini idrok eta oladigan madaniyatli inson darajasida voyaga yetkazishni nazarda tutadi. Bunda o'quvchilar musiqa san'atini butun nafosati bilan o'rganishlari, ommaviy musiqa faoliyatlari: musiqani badiiy idrok etish, yakka va jamoa bo'lib qo'shiq kuylash, raqsga tushish va ijodkorlik malakalarini shakllantirish asosiy maqsad bo'lib hisoblaniladi. Shuningdek, o'quvchilar musiqiy iqtidorni rivojlantirish, musiqa san'atiga mehr va ishtiyoqni oshirish, musiqa san'atiga qiziquvchi o'quvchilarning o'sishlari uchun zaruriy shartsharoitlar yaratib berish, ularning badiiy extiyojlarini qondirish musiqiy ta'lim - tarbiyaning asosiy vazifasini tashkil etadi. Shu bilan bir qatorda, jahon xalqlarining umuminsoniy musiqiy qadriyatlarini ham chuqur o'rganish, yosh avlodni xalqaro nufuzga moyillik bo'lgan madaniy durdonalardan baxramand bo'lishni ta'minlaydi.

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GROWTH AND PRODUCTIVITY INDICATORS OF VEGETABLE (SWEET) MAIZE MEGATON F1 AND GOLD F1 HYBRIDS IN SOUTHERN REGIONS

Abstract. The article analyzes the growth development and productivity indicators of the vegetable sweet corn Megaton F1 and Gold F1 plants in the conditions of the southern region Kashkadarya and presents the results obtained.

Key words. Sweet corn, hybrid, growth, yield, productivity, fertilization.

Introduction. One of the main problems in world agriculture is the lack of quality and nutritious food products. Because of its rich nutritional value, sweet corn is eaten when the unripe cobs are plump. It is usually eaten boiled, steamed or fried and mixed with various vegetables. Sweet corn (*Zea mays ssp. saccharata*) is becoming more and more important among the many subspecies of corn cultivated [2,5]. Sweet corn's taste and nutritional value have made it a prized crop in all countries, and sweet corn production is steadily increasing among countries around the world. The yield and productivity of sweet corn varies depending on the specific fertility status of the soil, the season of planting, the variety and species planted. Among other factors, the yield of sweet corn is influenced by the fertility status of the soil and the amount of fertilizers applied [3].

Materials and methods. Field experiments were carried out in 2022-2023 in the conditions of light gray soils that have been irrigated since ancient times in Karshi district of Kashkadarya region. The purpose of the study is to evaluate the growth, development and productivity of vegetable corn Megaton F1(st) and Gold F1 hybrids as main and repeated crops in different periods. Planting was carried out in 70x20 scheme as main crop on 10.03, 20.03, 20.04, 10.05 as repeated crop on 30.06, 10.07, 20.07 at a depth of 4-5 cm.

Megaton F1(st) is a hybrid heterozygous plant that produces bright yellow full and dense seeded pods at pod maturity. The pods are perfect for eating, storing and canning when they are ripe. According to the growth period, it is a medium hybrid. With a strong root system, the plant forms stems that are resistant to falling under the influence of wind. At the time of the plant stumps, 1.8-2 pieces of almost the same size are formed on each stem of the same cylindrical shape. The amount of dry matter in the plant is 28%. The height of the formation of the fertile joint in the plant is 75-80 cm. The length of the stumps is 24-26 cm, and when good agrotechnics are used, it produces a stump of 28-30 cm. The side section of the bulb is 5 cm and forms full and dense large grains with 18-20 rows. The product

does not lose its quality for a long time. A hybrid suitable for main and repeated planting, resistant to blister and powdery mildew disease [5,7].

Gold F1 is a sweet corn hybrid suitable for main and repeat crops and requires relatively warm temperatures. For the growth and development of the hybrid, the optimum temperature of the soil is required to be around 20-25 °C. When hybrid seeds are sown with a favorable planting time and a favorable soil environment, the seeds will produce uniform lawns in 7-10 days. It is a hybrid medium-sized plant with a growing period of 90-100 days[5,7].

During the experiment, seeds were sown at a depth of 4-5 cm in 10.03, 20.03, 20.04 and 10.05 as the main crop. During the planting period, the precipitation was observed in March, and the germination process was 7-10 days, and in the other periods, 5-7 days, respectively. The process of sprouting took place with the formation of even grasses. In the course of the experiments, when the height of the plants reached 12-15 cm, the treatment between the first row was carried out.

It can be seen from the data that germination was delayed in both hybrids planted in 10.03 period. It was found that Megaton F1(st) hybrid slightly outperformed Gold F1 hybrid in terms of germination index even at relatively low temperature. Almost no differences were observed in the seeds sown in the period 20.03. Germination was found to be 80-81%. When it was planted in 20.04 period, it was observed that the germination rate was equal in both varieties, i.e. 97-98%. When planted in the 10.05 period, a relatively low rate of germination was noted due to the lack of moisture in the soil. It was found that standard plants were formed with uniform growth and development when appropriate agrotechnical measures were applied to plants.

Discussion of research results. According to Table 1, planting periods for plant growth, development and productivity indicators had a significant impact. It was found that Megaton F1(st) and Gold F1 hybrids planted at 10.03 were 175 cm and 178 cm, respectively, with no significant difference in growth. It was found that the samples planted in the 20.03 period were on average 171 cm and 175 cm, respectively.

Table 1

Growth and productivity indicators in the main and repeated planting

When grown as a main ein																
The period when the seed is sown	Megaton F ₁ (сr)								Gold F ₁							
	Plant height cm	joint spacing cm	Leaf length cm	Leaf width cm	Weight of one sow, gr.	The number of stalks on the	The number of rows of grain	The number of grains in one	Plant height	joint spacing cm	Leaf length	Leaf width cm	Weight of one sow, gr	The number of stalks on the	The number of rows of grain	The number of grains in one
10.03	175	17.5	73.1	7.8	498.5	1.9	1.7	60.5	17.8	16.3	80.1	7.5	489.5	2.0	1.6	60.1
20.03	171	16.8	75.7	7.1	507.4	2.0	1.8	60.9	17.5	16.7	76.5	7.4	510.4	1.9	1.6	60.5
20.04	172	20.4	71.1	7.6	515.4	2.4	2.0	61.4	18.0	18.9	73.5	7.0	512.4	2.3	1.9	61.1
10.05	160	14.2	70.2	6.8	498.8	1.8	1.7	59.5	16.7	16.8	73.0	6.5	488.8	1.9	1.6	59.1
When grown as a repeat ein																
30.06	172	17.3	72.0	7.9	485.6	1.8	1.6	59.9	17.6	16.9	77.8	7.1	490.5	1.9	1.7	60.7
10.07	180	18.4	77.6	8.0	504.5	2.0	1.8	60.4	17.8	17.8	79.2	7.3	499.2	2.2	1.9	61.1
20.07	175	19.9	80.2	7.6	503.0	1.7	1.7	60.2	17.2	18.6	75.8	9.0	493.6	2.0	1.7	60.8

When planted in this period, the Megaton F₁ hybrid showed relative superiority in terms of plant height. The Gold F₁ hybrid planted in the period of 20.03 has a low height, that is, an average of 175 cm. Among the planting periods, the tallest plants were planted in the 20.04 period, i.e. 172 cm and 180 cm respectively. It was found that the Gold F₁ hybrid recorded a higher result (plant height) than the standard. Hybrids with the lowest results, i.e. 160 cm and 167 cm, appeared when planted at 10.05. In addition, planting dates had a significant effect on changes in other plant characteristics. The joint spacing in the plant changed according to the planting period, the highest (longest joint spacing) result among the periods was recorded on average 20.4 cm and 18.9 cm respectively when planted in the 20.04 period. The shortest joint spacing was 14.2 cm recorded in the Megaton F₁ hybrid planted in 10.05. In the Gold F₁ hybrid, the shortest joint spacing, i.e. 16.7 cm, was observed when it was planted at 20.03. In addition, it was found that the length of the leaves in the plants varied depending on the planting dates, and the plants with the longest leaves were found to be 73.1 cm and 80.1 cm, respectively, when planted in the 10.03 period. During this period,

there was a difference between the length of the leaves of the planted plants, and relatively longer leaves were observed in the Gold F1 hybrid. The plants with the shortest leaves were found to be 70.2 cm and 73.0 cm when planted at 10.05, respectively. It was 7.8 cm and 7.5 cm respectively when planted in 10.03 period. Plants with the shortest leaf width were 6.5 cm and 6.8 cm when planted at 10.05.

When we analyzed the productivity indicators, it was found that the number of pods per bush, the weight of one pod, the number of rows of grains per pod, and the number of grains per pod changed depending on the planting period. In particular, when planted for the main crop, the number of pods per bush was higher when planted in the period of 20.04, i.e. Megaton F1 2.4 units and Gold F1 2.3 units, and when repeated planting, Megaton F1 2.0 units and Gold F1 produced 2.2 units when planted in the period of 10.07. An increase in the weight of the sows was observed in the hybrids planted during these periods, it was 515.4 g and 512.4 g in the main planting and 504.5 g and 499.2 g in the repeated planting. The increase in the number of grain rows in the field was correspondingly, when the Megaton F1 hybrid was planted in the same period, 20 rows of the Gold F1 hybrid were planted, 19 rows of the Gold F1 hybrid, and 18 rows of the Megaton F1 hybrid, and 19 rows of the Gold F1 hybrid were produced. The number of grains in one sow also recorded a high index when it was sown in this period.

Conculution. Planting periods affect the growth, development and productivity of sweet corn, and it was determined that the most favorable planting period was 20.04 hours for the southern region when planted as a main crop, and 10.07 hours for both hybrids when planted as a repeat crop.

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TODAY'S STATUS AND INDICATORS OF ELECTRICITY

Annotatiton. In the world, special attention is being paid to the complete and continuous satisfaction of the need for electricity supply of the population and economic sectors, to increase the production of renewable energy sources and to improve the accounting of its supply. According to the World Energy Agency, «in 2021, the volume of renewable electricity production in the world set a new record, accounting for 6% of the total electricity generation and reaching almost 295 GW»

Key words: In the world, consumers, electricity, supply and demand, entities, accounting, relevance and regulatory framework.

Introduction: Attracting large-scale investments to electric power supply entities and improving the reasonable assessment of their financial activity requires increasing the transparency of the assessment of their financial status by effectively establishing accounting in electric power supply entities.

In order to ensure uninterrupted supply of electricity to consumers in the world, special attention is paid to the research on ensuring their financial stability in electricity supply enterprises. In these researches, the development of the accounting policy of the electricity supply enterprises, the classification of assets, their recognition, evaluation, organization and maintenance of accounts are defined. Taking into account the specific features of the activities of supply enterprises, such as the fact that the supply and demand for electricity remains variable, the lack of an opportunity to store electricity as a commodity, the organization of liabilities, private capital, income and expense accounts, in economic entities in the energy sector that are moving to international standards of financial reporting scientific research is being conducted in such areas as the application of these standards.

In Uzbekistan, the issues of transformation of electricity supply enterprises and expansion of attracting investments to them, continuous increase of electricity produced per capita are considered as a priority direction. «Until 2030, the development of production capacities and the implementation of large investment projects in the electric power sector, including attracting direct foreign investments, are set»⁶⁴ To ensure the execution of these tasks, it is necessary to

⁶⁴ Ўзбекистон Республикаси Президентининг 2019 йил 27 мартдаги ПҚ-4249-сон «Ўзбекистон Республикасида электр энергетика тармоғини янада ривожлантириш ва ислоҳ қилиш стратегияси тўғрисида»ги қарори. Қонун ҳужжатлари маълумотлари миллий базаси, 28.03.2019 й., 07/19/4249/2840-сон; 08.07.2021 й., 06/21/6258/0651-сон

build new electricity production facilities and modernize existing ones, renew outdated fixed assets, widely introduce market mechanisms to the electricity industry, and increase their investment attractiveness by effectively introducing international standards of financial reporting in electricity supply enterprises. Development of scientific proposals and practical recommendations in the implementation of these tasks is one of the urgent issues. Decree of the President of the Republic of Uzbekistan No. PF-6010 of June 18, 2020 «On additional measures to improve the mechanism of natural gas and electricity sales», No. PF-5059 of May 29, 2017 «Supply and consumption of electricity and natural gas Decree No. PQ-4249 dated March 27, 2019 «On the strategy of further development and reform of the electric power industry in the Republic of Uzbekistan» dated November 14, 2017 No. 3384 «On measures for the rapid implementation of the automated system of control and accounting of electricity and natural gas», No. PQ-3012 of May 26, 2017 «Further development of renewable energy in 2017-2021, increasing energy efficiency in economic sectors and the social sphere on the program of measures», the decision of the Cabinet of Ministers No. VM-1050 of December 26, 2018 «On approving the rules for the protection of electrical network facilities» and No. VM-111 of February 28, 2020 «Simplifying the procedure for connecting business entities to electric networks and This thesis research serves to a certain extent in the implementation of the tasks defined in the decisions of «Measures to further improve the business environment», as well as in other normative legal documents related to this field.

Analysis and results: justification of the role of the electricity industry in the economy of the Republic of Uzbekistan and the need for its development; to study the importance, relevance and legal basis of accounting in electricity supply enterprises; analysis of the prospects of using foreign accounting experience in electricity supply enterprises; improving the formulation of accounting and tax accounting policies in electricity supply entities;

improvement of organization of accounting of assets, private capital and liabilities of electricity supply enterprises;

making proposals on the application of international standards of financial reporting in the accounting of electricity supply entities;

improvement of accounting in electricity supply enterprises.

«Working transformation tables» for the preparation of profit and loss reports according to the nature of expenses using financial statements and balance sheet data in electric energy supply entities;

0120 - «Building, structure and conductive equipment» accounting account, it is proposed to open working accounts 0123 - «Transmission wires», 0124 - «Bases» and 0125 - «Insulators» for the correct formation of the cost of electricity and other goods and services;

0130 - «Machines and equipment» in the accounting account, based on the participation and characteristics of fixed assets in the transmission of electricity,

0131 - «Power transformers», 0132 - «Power machines and equipment» and 0132 - «Measurement and control devices» offered to open accounts;

A system for calculating the cost of various branches of electricity transmission was developed on the basis of «free-to-consumer» in the entities of electricity supply.

Based on the characteristics of the industry, the plan of accounts for accounting based on international standards of financial reporting has been implemented in electricity supply enterprises;

based on the type and location of fixed assets, the proposal to assign a twelve-digit inventory number to each object (item) was adopted for practical use;

the proposal to record debt for electricity purchased from business entities producing electricity in a separate working account 6011 - «Debt to business entities for electricity» has been put into practice;

According to international standards, a formula for creating a reserve for employees' vacations before their start was developed and adopted for implementation.

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Nurniyazov F.
assistant
«Accounting» department
Samarkand Institute of Economics and Service

ACCOUNTING AND SALES CONTROL OF ELECTRICITY CONSUMPTION

Annotatiton. The changes taking place in our country also cover the industrial sector. Today, special attention is being paid to the field of electric power in our country, all of which are actions aimed at improving the lifestyle of the population. In this article, ideas have been given on accounting and control of energy consumption of the population.

Key words: Ignoring energy efficiency, measuring devices in the transmission of energy resources, a new system.

Enter. Measures are being developed to save electricity and use it rationally.

It is very important to keep the correct accounting of expenses, to correctly determine the cost of services, to avoid excess expenses in entities that provide electric energy services. The fact that these problems are not sufficiently researched, that they are not sufficiently reflected in the periodical literature, indicates the extreme complexity of the chosen topic.

Inattention to energy saving, accurate and correct functioning of measuring devices in the transmission of energy resources, high energy consumption in technological processes, wear and tear of electrical devices lead to an increase in the wastage of energy resources. This created the need to introduce the most modern technology and system in the field.

Analysis and results: The new project is called an automated system of accounting and control of electricity consumption, all consumers will be provided with an on-line meter, and the activities of power grid enterprises will also be adapted to the new system. Through this, it is envisaged to fully achieve the reliable supply of quality electricity to the republic's economy and population. Although this system is widely used and successfully tested in a number of developed countries, it is expected that our country will be the first in the world to switch to a fully automated system by 2020.

In order to use the new system, the following works are being carried out:

According to the project, in 2016-2017, all consumers in our region were provided with an automated system of accounting and control of electricity consumption. «Zarafshan electric networks» (Samarkand district) since the 2nd quarter of this year

8,500 online meters will be installed in small-capacity legal and residential households. This system will be tested within 6 months. If deficiencies are

detected during this time, measures will be taken to eliminate them. After that, the installation of a new system will be carried out at the regional level. At the same time, the project-estimate works in Samarkand district have come to an end.

In order to work in this system, the employees of the new electric network enterprises are doing the following:

A number of obligations are imposed on the company implementing the project. Soon 120 employees will be trained for this purpose. Once the new system is in place, there will be no need for any supervisory staff in the field. All control work is carried out by computer centers in the districts, and the tasks of 500 controllers are performed automatically.

We can see the advantages of the online system in the following:

Determining the electricity consumption of consumers, making calculations is fully automated. In the new system, the concept of debt itself will not exist. Electricity is supplied on a prepaid basis. If the consumer does not pay the appropriate amount, he will be automatically disconnected from the network. New meters will clearly show how much electricity is being delivered to a home or business. Another convenience is that the subscriber himself can monitor it through the Internet. In this case, the subscriber can connect his mobile phone to the «Elektrihisob» program, access his personal cabinet through the «Uzbekenergo» website, monitor his account and payments, send inquiries and receive information on payments and debts to his mobile phone number. can receive short messages. Consumers can directly track information about their accounts.

Today, up to 17% power loss is observed in the electricity supply. In the new system, this indicator is expected to drop to 3 percent. In general, the new system has many advantages. For example, you forgot to turn off an electrical appliance when leaving the house. At such a time, you can call the district power center and disconnect your house from the network until a certain hour. Consumers are requested to install electricity meters outside.

As mentioned above, from December 31, 2017, all consumers in the region got an online meter. For this reason, new meters will also be installed to debtor consumers. But due to the electricity debt, the meter will not work until the consumer settles the bill. as soon as the computer receives payment information, the counter starts. For this reason, there is no debt in the new system. This prevents problems between the supplier and the consumer.

It is not for nothing that serious attention is paid to alternative energy sources in our country. Because it is renewable and environmentally friendly. In addition, natural resources are limited, and it has already been proven that they will run out in time.

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Olimov A.F.
katta o'qituvchi
Namangan muhandislik qurilish instituti

AXBOROT TEXNOLOGIYA VA INGLIZ TILI FANLARIDA INTEGRALLASHGAN VAZIFALARDAN FOYDALANISH

Annotatsiya. Maqolada fanlararo aloqalarni tashkil etishning umumiy didaktik va psixologik-pedagogik shartlari hamda kelgusi informatika o'qituvchilariga ingliz tili va axborot texnologiyalarini o'qitishda integral vazifalardan foydalanish misollari keltirilgan. Ushbu vazifalardan foydalanish kelajakdagi informatika o'qituvchilarining kasbiy tayyorgarligi darajasini oshiradi.

Kalit so'zlar: Informatika, Kompleks, loyiha, Multimedia, gipermatn, gipermedia, telekommunikatsiya, innovatsiya, yuqori texnologiyalar, Kompyuter dasturlari, Tillar va dasturlash tizimlari.

Olimov A.F.
senior teacher
Namangan Engineering and Construction Institute

USE OF INTEGRATED TASKS IN COMPUTER SCIENCE AND ENGLISH

Abstract. The article presents the general didactic and psychological-pedagogical conditions for the organization of interdisciplinary relations, as well as examples of the use of integrated tasks in the teaching of English and information technology to future teachers of computer science. The use of these tasks will increase the level of professional training of future computer science teachers.

Keywords: Computer Science, Complex, Project, Multimedia, Hypertext, Hypermedia, Telecommunications, Innovation, High Technology, Computer Software, Languages and Programming Systems.

Oliy ta'limning ikki bosqichli ta'lim tizimiga o'tishi bilan (bakalavr, magistr) kelajakdagi kompyuter fanlari o'qituvchilarining kasbiy tayyorgarligi "Pedagogik ta'lim" Oliy ta'lim standartlari asosida amalga oshiriladi, bu quyidagi o'quv sikllarini o'rganishni ta'minlaydi: gumanitar, ijtimoiy-iqtisodiy, matematik va tabiiy fanlar, jismoniy tarbiya, o'qitish va ishlab chiqarish amaliyoti, yakuniy davlat imtxonlari. Ammo, afsuski, o'rganilayotgan fanlar, hatto professional sohada ham, asosan, alohida holda, o'zaro bog'liqliksiz va kelajakdagi kasbiy faoliyati uchun ularning integratsion ahamiyatini aniqlamasdan ko'rib chiqiladi.

Shunga qaramay, kelajakdagi o'qituvchilarni o'qitish, shu jumladan informatika fanlararo aloqalarni hisobga olgan holda o'tkazilishi kerak.

Bizning fikrimizcha, fanlararo aloqalar uchun ushbu umumiy didaktik va psixologik- pedagogik shart-sharoitlarni muayyan intizomning boshqalar bilan, shu jumladan undan olib tashlanganlar bilan aloqalarini maqsadli ravishda mustahkamlash va yangi aloqalarni yo'lga qo'yish orqali kengaytirish kerak.

Ushbu yondashuvga asoslanib, o'qituvchi integratsiyalashgan vazifalarni maqsadli ishlatgan holda, fanlar o'rtasidagi aloqani kuchaytirishi mumkin.

Kompleks integratsiyalashgan vazifalar deganda bir-biriga bog'liq bo'lgan masalalar bo'yicha ilmiy bilimlardagi usul va faoliyatni sintez qiladigan vazifalar tushuniladi. Ularning mohiyati umumiy ta'lim, psixologik, pedagogik va ixtisoslashtirilgan fanlarni yaqinlashtirish, mantiq va argumentlash ko'nikmalarini shakllantirishdan iborat; asosiy, muhim narsani ajratib ko'rsatish qobiliyatini rivojlantirish; xatolarni toppish va tahlil qilish qobiliyatlarini boshlash va rivojlantirish [1].

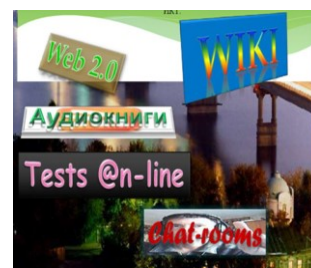
Kelajakdagi informatika o'qituvchilarini tayyorlashda o'rnatilgan integral vazifalardan foydalanish misollarini ko'rib chiqaylik.

Bugungi kunda informatika o'qituvchilariga nafaqat maktab o'quvchilariga informatika asoslarini o'rgatish, balki informatika fanini o'qitish mazmunini moslashtirmaydigan vazifalar yuklangan.

Zamonaviy kompyuter fanlari o'qituvchisi unga mahalliy va global tarmoqlar bilan ishlashga imkon beradigan, barcha turdagi zamonaviy aloqa vositalari, matn, grafik, video, audio ma'lumot, kompyuter grafikasi tizimlari, dasturiy tizimlari va komplekslari bilan ishlashga imkon beradigan kompetentsiyalarga ega bo'lishi kerak tizimlar, tarmoq va amaliy dasturlarni ishlab chiqish uchun vositalar va boshqalar), o'quv elektron vositalar, joriy etish Multimedia, gipermatn, gipermedia, telekommunikatsiya va boshqalar texnologiyalariga asoslangan [3].

Bundan tashqari, maktablarning kompyuter jihozlari bilan jihozlanishining texnik suratlari bilan bog'liq holda, informatika kursini tashkil etishning amaliy amaliyotida informatika o'qituvchisi osongina navigatsiya qilishi kerak bo'lgan dasturiy ta'minot mavjud. Ko'pgina dasturlar, dasturlash tillari, yangi operatsion tizimlar, tarmoq va amaliy dasturlarni ishlab chiqish vositalari odatda ingliz tilida yaratilgan. Shuning uchun kelajakdagi informatika o'qituvchisi ingliz tilini yaxshi bilishi kerak.

Uchinchi avlod standartlarida kelajak o'qituvchisi kasbiy aloqa darajasida (OPK-5) chet tillaridan birini bilishi kerakligi qayd etilgan. Ammo informatika fan sifatida juda keng qo'llaniladigan narsalarga ega: axborot nazariyasidan hisoblash va amaliy matematikaning usullarigacha va



ularni turli bilim sohalarida fundamental va amaliy tadqiqotlarga. Chet tilini yakka holda o'rganish, kasbiy faoliyatda amaliy qo'llanmasdan, tilni o'rganishda yaxshi natijalarga erishish qiyin bo'ladi. Shuning uchun chet tilini o'rganish kasbiy fanlari bilan uzviy bog'liq holda amalga oshirilishi kerak.

“Chet tili” faniga parallel ravishda bo'lajak informatika o'qituvchilari kasbiy siklning quyidagi fanlarini o'rganadilar: “Kompyuter dasturlari”, “Til va dasturlash tizimlari”, “Kompyuter tarmoqlari, Internet va multimedia texnologiyalari”. Shuning uchun uni tashkil qilish eng qulay bo'ladi

“Chet tili” fanini ushbu fanlar bilan birlashtirish.

Sanab o'tilgan fanlarning har birida o'quv jarayoni quyidagi algoritmgaga muvofiq tashkil etilgan: nazariy materialni o'rganish, laboratoriya (amaliy) ishlarni bajarish, vakolatlarga yo'naltirilgan vazifalarni bajarish (ma'lum bir fan vakolatiga yo'naltirilgan vazifalar). Barcha fanlar bo'yicha nazariy materiallar, laboratoriya ishlari va vakolatlarga yo'naltirilgan vazifalar tekshirilgandan so'ng talabalar yakuniy integrallashgan topshiriqni bajarishga taklif etiladilar [2].

"Kompyuter dasturlari", "Tillar va dasturlash tizimlari", "Kompyuter tarmoqlari, Internet va multimedia texnologiyalari" va "Chet tili" fanlari bo'yicha kompleks vazifa sifatida biz quyidagilarni taklif qilamiz: tanlangan mavzu bo'yicha xorijiy tilda prezentatsiya yaratish. Taqdimot dasturlash tillarida amalga oshirilishi kerak, dinamik va samarali kirishni, asosiy sahifani, asosiy ma'lumot sahifalarini, ilovalarni (mualliflar, statistika va boshqalar) o'z ichiga olishi kerak. Bundan tashqari, navigatsiya (har qanday sahifadan boshqasiga o'tish) aniq o'ylangan bo'lishi kerak, boshqaruv tugmachalari bo'lgan video, sahifalarning ovozli qo'shilishi kerak. Taqdimotlar talabalar tomonidan loyiha shaklida va guruhda (3-4 kishi) o'tkaziladi, bu esa o'z faoliyatini loyiha doirasida tarqatish imkonini beradi, bundan tashqari o'zaro o'rganish jarayoni. Talabalarga taqdimotning navigatsiya tizimini tashkil qilish uchun dasturiy ta'minot va dasturlash tilini tanlash huquqi taqdim etiladi [4].



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Olimova D.A.
Shahrisabz davlat pedagogika instituti
Geografiya kafedrası o'qituvchisi
Mo'minov H.N.
Shahrisabz davlat pedagogika instituti talabasi

SHAHRISABZ SHAHRIDATURIZMINI RIVOJLANTIRISHNING GEOGRAFIK XUSUSIYATLARI

Annatsiya. Ushbu maqolada O'zbekistonning turistik shaharlaridan biri hisoblanmish Shahrisabz shahrining turistik saloyihati va tarixi haqida so'z yuritilgan.

Kalit so'zlar: Turizm, Shahrisabz, tarix, iqtisodiyot, YUNESKO, tarixiy, obidalar, shahar, turistik salohiyat.

Olimova D.A.
teacher
Department of Geography
Shahrisabz State Pedagogical Institute
Mominov H.N.
student
Shahrisabz State Pedagogical Institute

THE ROLE OF SHAHRISABZ IN TOURISM IN KASHKADARYA

Abstract. This article discusses the tourist potential and history of Shakhrisabz, one of the tourist cities of Uzbekistan.

Keywords: Tourism, Shahrisabz, history, economy, UNESCO, history, monuments, city, tourist potential.

Rivojlanib borayotgan O'zbekiston davlatini turizmsiz tasavvur etib bo'lmaydi. Ma'lumgina, bugungi kunda ushbu so'z, o'zbek tiliga shu darajada o'zlashdiki, bugungi kun taraqqiyotining bir bo'lagiga aylanib qoldi. Bu borada yurtboshimizning ushbu sohaga e'tibor berayotganlarini alohida e'tirof etib o'tish lozim.

Qashqadaryo viloyatining Shahrisabz shahri 2024 yil Iqtisodiy hamkorlik tashkiloti turizm poytaxti deya e'lon qilindi. Bu haqda Turizm va madaniy meros vazirligi axborot xizmati O'zbekiston raisligida onlayn formatda o'tgan IHT Turizm vazirlarining IV yig'ilishi yakuniga ko'ra ma'lum qildi.

Bunda Shahrisabz shahrining boy tarixi va madaniy merosi, Ipak yo'lida turizmning rivojlanishidagi o'rni va sohani barqaror rivojlantirish salohiyati inobatga olindi. Ma'lumot uchun, Shahrisabz 2000 yillik tarixga ega bo'lib, UNESCOning Butunjahon merosi representativ ro'yxatiga kiritilgan.

O‘z navbatida Shahrisabzning ushbu maqomni olishini keng miqyosda nishonlash ko‘zda tutilgan. Qolaversa, shaharda va butun Qashqadaryo viloyatida turizm infratuzilmasini yaxshilash, ekoturizm, etnoturizm va boshqa yo‘nalishlarda salohiyatni yuksaltirish, hududning nomoddiy merosini keng ochib beruvchi madaniy tadbirlar, turizm tadbirkorligi, shu jumladan, yoshlarning faolligini oshirish bo‘yicha alohida dastur amalga oshirilishi ko‘zda tutilgan.

O‘zbekiston boshqa davlatlardanfarqli o‘laroq, zamonaviy arxitektura namunalari bilangina emas, balki qadimiy qadamjolari bilan ham mashhurdir. Fikrimizning dalil sifatida buyuk bobokalonimiz Amir Temurning, “Bizning qudratimizga shubha qilsang, qurgan binolarimizga boq”-degan gaplarini dalil sifatida keltirishimiz mumkin [1-3].

Yurtimiz tarixiy joylarga boy, ammo Sohibqiron Amir Temur tug‘ilib-o‘sgan Shahrisabz shahri alohida e‘tiborga molikdir. Ushbu shahar tarixiga nazarsolsak, Shahrisabz–O‘zbekistonning qadimiy va go‘zal shaharlaridan biri bo‘lib, tarixiy markazi YUNESKOning Butunjahon madaniy merosi ro‘yxatiga kiritilgan, shuningdek bu jannatmakon o‘lka O‘zbekistobdagi qadimiy shaharlardan biridir. Arxeologik ma‘lumotlarga ko‘ra, shaharga miloddan avvalgi 1-ming yillikning o‘rtalarida asossolingana va bu ko‘hna diyordan milod boshlarida va ilk o‘rta asrlarda turli nomlar bilan atalgan [4-8]. XIII asrdan so‘ng Shahrisabz nomi ham urf bo‘lgan, ba‘zi ma‘lumotlarga ko‘ra, shahar miloddan avvalgi VIII asrda tashkil etilganligi haqidagi ma‘lumotlarni ko‘rishimiz mumkin. Shahar qadimgi davrlarda Kesh deb nomlangan. Shahrisabz yaqinidagi Xo‘ja Ilg‘or qishlog‘i (hozirgi Yakkabog‘ tumani hududi) da Sohibqiron Amir Temur tavallud topgan. Shahar o‘sha davrda “Qubbatul ilm val adab” nomi bilan yuritilgan. Mening o‘ylashimcha, bu ko‘hna diyorda ko‘plab mashhur allomalarni tavallud topganligi uchun ham tarixiy obidalarga boy va bu obidalarni ularning nomlari bilan ham yodga olishimiz mumkin, bu allomalardan Xusrav Dehlaviy, Bedil, Mirzo G‘olib kabilarni aytishimiz mumkin.

Amir Temur va Temuriylar davrida Shahrisabz ulkan saltanatning yirik shahriga, barlos beklarining yozgi qarorgohiga aylantirilgan, shuningdek Temuriylar davrida shaharlarning ansambllar majmuyi qurilishi keng tarqalgan, bu Shahrisabzda ham yaqqol ko‘rinadi, bu yerda Dorus-Tilovat va Dorus-Saodat ansambllari ajralib turadi. Dorus-Tilovatni sobiq mahalliy xonaqohlar maqbarasida saqlanib qolgan uchta inshoot tashkilotadi. Bu Shamsiddin Kulol va Gumbazi Seyidon maqbaralari hamda Ko‘k Gumbaz jome‘ masjidi inshootlaridir. Shamsiddin Kulol maqbarasi eng birinchi qurilgan Shayx 1370 yilda vafot etgan bo‘lib, uning qabri izzat-ehtirom qilingan. Uning yonida Gumbazi Seyidon-Sayidlar gumbazi nomli Ulug‘bek avlodlarning maqbarasi qurilgan [9-12]. Bu bino kichik bo‘lishiga qaramay, o‘zining nafis mutanosibli va chuquro‘ymakor naqshlar bilan qoplangan, ajoyib ishlangan kirish eshigi bilan insonni mahliyo qiladi. Me‘morchilik ansamblini mug‘ullargacha bo‘lgan qurilish poydevorida qadko‘targan Ko‘k Gumbaz jome‘ masjidi tugallaydi. Temuriylar davrida qurilgan Oqsaroy qasrining peshtoq devori, Dorus-saodat majmuasi, Ko‘k

Gumbaz masjidi, ShamsiddinKulol maqbarasi, Jahongir maqbarasi, Hazrati Imom masjidi, hamda Chorsu bozori, Chubin madrasasi, Eshonpir, Kunduzak masjidlari kabi me'moriy obidalar saqlanibqolgan. Shuningdek, Temuriylar davrida Oqsaroy majmuasi ham qurilgan bo'lib, barpoetilgan barcha inshootlar orasida eng antiqasi hisoblanadi. Ispan elchisiKlavixoo'zkundaligida shaharda ko'plab mahobatli binolar va masjidalr borligini hamdaqurilayotganini ta'kidlaydi, lekin Shahrizabz faqatgina buyuk amirning, "taxt zamini" emas, balki Temurning tug'ilishidan ancha ilgari u o'z tarixiga ega edi deb yozadi.

Avvalo, Shahrizabz jahonning eng qadimgi shaharlaridan biri ekanligini unutmashimiz lozim. Olimlarning fikricha, Shahrizabz 2700 yoshda, bu esa Boqiyshahar Rimning yoshidir. YUNESKO qaroriga ko'ra aynan shu sana 2002-yilda butunmadaniy dunyoda nishonlangan. Eramizdan avvalgi IV asrda Iskandar Zulqarnaynlashkarlari dam olishi uchun Kesh vohasida to'xtagan, Baqtriyaning satrapi bo'lgan Bess Doro III ni o'ldirib o'zini "osiyo podshohi" deb e'lon qilgan, lekin uning aynan o'zi shu yerda asirga olingan. VII asrda shaharni arablar qamal qilgan, bir asr keyn esa Kesh shahri Muqanna rahbarligi ostida arablarga qarshi kuchli qo'zg'olonning markazi ham bo'ldi [13-17].

Qancha qiyinchiliklar va yomon kunlar bo'lmasin xalqimiz ularning barchasini yengib o'tdi va muayyan bir xalq sifatida shakllandi. Mustaqillik yillarida shahar qiyofasi tubdan o'zgartirildi va qayta qurildi. Shahrizabz ahlining Temuriylar davri ulkan madaniy va ma'naviy merosi, noyob tarixiy yodgorliklarini asrab avaylash,yosh avlodnibuyuk ajdodlarimizning munosib vorislari qilib tarbiyalash va ularni ozod mamlakatimiz buyuk istiqbolini yaratishga qodir kishilar qilib yetkazish ishiga qo'shgan alohida xizmatlari e'tiborga olinib hamda Amir Temur tavalludining 660 yilligi munisabati bilan Shahrizabz, "Amir Temur ordeni" bilan mukofotlandi. Bu xalqimizuchun munosib taqdirlash boldi desak ham hech mubolag'a bo'lmaydi.

Mustaqillik yillarida turizmni rivojlantirish, sayyohlar oqimini ko'paytirishmaqsadida keng qamrovli islohotlar amalga oshirilganligini har bu soha misolida yaqqol ko'rishimiz mumkin. Xalqimizning noyob madaniy boyligi va tarixiy merosinitarg'ib qilish, xalqaro miqyosda mamlakatimizning ijobiy ko'rinishini shakllantirish vositasi bo'lgan turizm ahamiyati jihatidanVatanimizni dunyoga tanitishda sport, san'at va madaniyatning boshqa sohalari qatoridan muhim o'rin egallaydi.

Eng muhimi shundaki, yurtimizda ya'ni ko'hna zaminimiz Shahrizabzda hamturizmni rivojlantirish uchun barcha shart-sharoitlar yaratilmoqda va turistalar sonini yanada ko'paytirish maqsadida bir qancha islohotlar ham amalga oshirilmoqda. Bunga biz hozirgi kunda imzolanayotgan diplomatic shartnoma va kelishuvlarni aytishimiz mumkin. O'zbek milliy o'yinlarini xorijiy va mahalliy sayyohlarga namoyish etish maqsadida Kitob tumanida joriy yilning 23-mart kuni uloq-ko'pkari o'yinlari tashkil etildi. Uni 80 dan ortiq xorijiy va 100dan ortiq mahalliy sayyohlar zo'r qiziqish bilan kuzatdilar.

Turistlarni keng jalb qilish bo'yicha tadbirlarni jadallashtirish borasida shaharning turistik brendini yaratish va keng miqiyosda targ'ib qilish bo'yicha tanlov e'lon qilindi, chet el ommaviy axborot vositalari va turistik kompaniyalari uchun infoturlar tashkil etish maqsadida yo'nalish va mehmonxonalar ro'yxati tayyorlanmoqda, videofilmlar yaratish yuzasidan senariy va shaharning turistikekskursiya kartasi ishlab chiqilmoqda, shuningdek turistik ma'lumotnoma ofislari tashkil etish bo'yicha ishlar olib borilmoqda. O'tgan 2023-yilning yakunlariga ko'ra, O'zbekistonga 2,6 mln nafar xorijiy turistlar tashrif buyurgani va 833,5 mln AQSh dollar miqdorida turistik xizmatlar eksporti amalga oshirilgan, bu 2021-yil statistikasidan 125 foizga shubhasiz ko'pdir. O'zbekistonga tashrif buyurgan turistlarning umumiy sonidan 6,260 million kishi MDH mamlakatlaridan, 488,4 ming sayyoh esa olis xorij mamlakatlaridan kelgan.

Shahrisabz bo'ylab sayr qilar ekansiz, eski madrasalarda yoki shunchaki yo'l bo'ylab joylashgan ko'plab esdalik sovg'alar bilan savdo qiluvchi ustaxonalarni ko'rishingiz mumkin. Tarvuz qo'ltiqlagan ko'ngli ochiq chollar, o'yib ishlangan sandiqchalar va rang –barang matolar kabi hunarmandchilik mahsulotlarini taklifetishga ustalar tayyor turishadi. Ular orasida shahar tasviri tushurilgan turli xil shakldagi magnitlar alohida ajralib turadi [18]. Odatdagidek loy va keramikadan yasalganlardan tashqari, yog'och, qog'oz, teri va hatto marmardan yasalganlari ham bor. Bundan tashqari Shahrisabz iqlimi ham turistlar uchun mos keladi negaki, havo unchalik issiq emas va tabiat qo'ynida sayohat qilayotganda iqlim ularga xalaqit bermaydi. Tog' yonbag'irlariga turistlar bilan tashrif buyurganda esa yovvoyi hayvonlarni daryolarda esa bir necha turdagi baliqlarni ko'rishimiz mumkin. Eng qiziqarlisi shundaki, Shahrisabzdan o'tadigan asosiy magistral buyuk italyan sayyohi Makro Poloning marshrutini takrorlaydi.

Xulosa so'ngida shuni aytish joizki, Shahrisabz har tomonlama turistlar uchun qulay makon hisoblanadi, undagi mehmonxonalar ham turistlar uchun har tomonlama moslashtirilgan.

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Omonova M.M.
magistrant
Osiyo Xalqaro Universiteti

**KORXONALARDA MARKETING TADQIQOTLARI NATIJALARINI
TAHLIL QILISH JARAYONLARIDA AXBOROT KOMMUNIKATSIYA
TEKNOLOGIYALARI FAOLIYATINI AMALGA OSHIRISHDA
MARKETING TAMOYILLANING AHAMIYATI**

Annotatsiya. Keyingi paytlarda jahon mamlakatlarida, jumladan mamlakatimizda ham tadbirkorlik faoliyatiga katta e'tibor qaratilmoqda. Tadbirkorlik faoliyati mamlakat iqtisodiyotini rivojlantirishda ham muhim ahamiyatga ega bo'lib bormoqda. Tadbirkorlik faoliyatida qaror qabul qilish va uni ishlab chiqishda tadbirkorlikning samarali vositasi hamda asosi bo'lib marketing hisoblanadi hamda tadbirkorlik faoliyatini boshqarish tizimida, uni tashkil etishda, rejalashtirish va nazorat qilishda muhim ahamiyat kasb etadi.

Kalit so'zlar: Marketing nazariyasi, Zamonaviy marketing, Sanoat korxonalarining faoliyati, Xaridorlar va iste'molchilar.

Omonova M.M.
master's student
Asia International University

**THE IMPORTANCE OF THE MARKETING PRINCIPLE IN
IMPLEMENTATION OF INFORMATION COMMUNICATION
TECHNOLOGIES IN THE PROCESS OF ANALYZING THE RESULTS
OF MARKETING RESEARCH IN ENTERPRISES**

Abstract. Recently, in the countries of the world, including our country, great attention is being paid to entrepreneurship. Entrepreneurship is also becoming important in the development of the country's economy. Marketing is an effective tool and basis of entrepreneurship in decision-making and development of business activities, and it is of great importance in the management system of business activities, its organization, planning and control.

Key words: Marketing theory, Modern marketing, Activity of industrial enterprises, Buyers and consumers.

Korxonaning marketing faoliyati uning bozorda omon qolishi va muvoffaqiyatining eng muhim funksiyalaridan biridir. Biznesni marketingsiz amalga oshirish mumkin emas. Jahon iqtisodiyotining globalashuvi natijasida texnologik taraqqiyot bilan parallel ravishda raqobat sharoitlari tobora murakkablashib bormoqdi. Iste'molchi elektron tijorat yoki boshqa usullar orqali dunyoning istalgan mamlakatida ishlab chiqarilgan mahsulotni osongina sotib

olishi imkoniyatiga ega bo'lib bormoqda. Bu esa allaqachon mavjud bo'lgan global raqobatni yanada keskinlashuviga sabab bo'lmoqda. Murakkab raqobat sharoitlarida ishlab chiqaruvchilar yoki xizmat ko'rsatuvchilar bozorda omon qolishi, o'sishi va faoliyati davomiylikni ta'minlashi, o'zining bozordagi ulushini oshirib borishi uchun zamonaviy marketing usullari va strategiyalaridan foydalanishni taqozo etmoqda. Brend bo'lib tanilgan korxonalar esa raqobatda ustunlikni ta'minlashi uchun asosiy e'tiborni mijozlar brendga sodiqligini oshirishga alohida ahamiyat qaratmoqda. Korxonalar klassik marketing konsepsiyalaridan chiqib, zamonaviy marketing boshqaruvi va mijozlarni shaxsiylashtirishga qaratilgan usullar yuqori darajada ahamiyat qaratmoqda. Zamonaviy marketing konsepsiyalarini o'zlashtirgan va yangi marketing tendentsiyalarini qo'llashi mumkin bo'lgan kompaniyalar global brend darajasiga ko'tarilmoqda. Bu tendentsiyalarga rioya qila olmaydigan kompaniyalar bozordan chetlashmoqda. Ushbu jixatlarni inobatga olganda korxonalarda zamonaviy marketing menejment tamoyillaridan foydalanish dolzarb vazifa sifatida qaralmoqda.

Globalashib borayotgan bozorda barcha korxonalar, ular kichik yoki katta bo'lishidan qat'iy nazar bozorga kirib borishi, unda faoliyat yuritishi, moslasha olishi va doimiy mavjud bo'lish uchun marketing faoliyatini turli yo'llar bilan amalga oshiradi. So'nggi yillarda rivojlanayotgan texnologiya ham parallel tarzda marketing yondashuvlarini o'zgartirdi. Ilgari mavjud bo'lgan klassik marketing usullari texnologik taraqqiyot natijasida tabdan o'zgarib bormoqda. Masalan, o'tmishda marketing sohasida yuqori ahamiyatga ega bo'lgan gazeta reklamalari asta-sekin raqamli marketing bilan almashtirilmoqda. Chunki, rivojlanayotgan texnologiya bilan parallel holda, eski marketing texnologiyalarining ham odamlarga ta'siri kamayadi. Yana bir asosiy tendensiya ma'lumki, "Marketing 5.0. uchta asosiy muammo fonida amalga oshadi: avlodlar farqi, farovonlikning qutblanishi va raqamli tafovut. Bu tarixda birinchi marta yer yuzida birga yashovchi besh avlodning qarama-qarshi qarashlari, mutanosibliklari va xatti-harakatlaridir."

Shunga ko'ra, bugungi murakkab raqobat va bir biridan keskin farq qiluvchi mijozlar bilan ishlash borasida qanday marketing yondashuvlaridan foydalanish muammosi borasidagi ilmiy tadqiqotlarga ustivor ahamiyat qaratilmoqda.

Korxonaning bozor faoliyatini samarali qurish maqsadli mijozlariga bo'ladigan munosabatlarini vujudga keltirish va qo'llab quvvatlashga ta'sir o'tkazish xisoblanadi. Korxonaning marketing faoliyatiga murakkab va o'zgaruvchan bo'lgan tashqi muhit omillari ta'sir qiladi.

Korxonada o'z savdo faoliyatida mijozlarni jalb qilish va ular bilan xamkorlik darajasiga olib chiqish marketing faoliyatini bosh maqsadlaridan biri xisoblanadi. Mijoz - muassasa, tashkilot, korxonada xizmatlaridan foydalanadigan shaxs, doimiy xaridorlar, buyurtmachilar. Ba'zi bir sotuvchilarning dimiy haridorlari va shu

haridorlarga nisbatan sotuvchi ham deyiladi. Mijozlar va xaridorlarni o'rganish odatda ularni «mijozli bozor» turkumiga bo'lib o'rganish keng tarqalgan.

Tashkilot o'z mijozlarini «shaxsan» taniydi, ularning nimani va qancha xarid qilishi haqida to'liq axborotga ega bo'ladi. Zarur tovarlar ishlab chiqarish eki xarid qilish o'z xaridorlarining ehtiylarini aniqroq va uzil-kesil qondirish, shuningdek, ularning kelajakdagi xoxish-istaklarini tahlil qilish borasida tuzatish kiritgan holda amalga oshiriladi. Mijozlar bilan ishlarni bunday tashkil qilishda axborot boshqa potensial xaridorlarga yetkazilish ehtimoli yuqori. Buning ustiga, hozirgi paytda muqobil, notijorat axborot manbalari (ishbilarmon hamkorlarning maslahati, ekspertlarning fikrlari) ahamiyatining ortishi kuzatilmoqda. Shu tariqa tashkilot yangi mijozlar jalb qilish bo'yicha qo'shimcha reklamaga ega bo'ladi.

Har bir bozor o'z xususiyatiga va mijozlarining turli-tuman ehtiyojlariga ega. Shu jihatdan, tashkilot mijozlar ko'lamini va tarkibini o'zgartirishi natijasida tovarni ishlab chiqarish hajmi, quvvati, sotish intensivligi, foyda me'yorlari turlicha bo'ladi. Demak, tashkilot o'z oldiga keng imkoniyatli mijozlar bozorini shakllantirish vazifasini qo'ymog'i lozim.

Xaridor talablari turli-tuman bo'lishi bilan bir qatorda ulardan qay birini birinchi va qaysinisini keyinroq qondirishga bevosita turli tovar yoki xizmat ko'rsatuvchi tashkilotlar o'zaro raqobatlashadilar. Masalan, to'rt a'zoli oila rahbari olgan maoshini va to'plagan jamg'armasini tabiiyki, rafiqasi bilan nimaga sarflashni maslahatlashadi. Uy-ro'zg'or buyumlarini yangilash, bolalar uchun kiyimkechak olish, birga ta'tilni xorijiy davlatda o'tkazish va shu kabi talablarni qondirish zarurati va imkoniyati bor deb faraz qilaylik. Bu tovarlarni va xizmatlarni taklif etuvchi tashkilotlar qay tarzda samarali va o'z vaqtida harakat qilsalar, ushbu oila ularning mijozi, xaridori bo'ladi. Demak, uy-ro'zg'or buyumlarini, bolalar kiyim-kechagini sotuvchi tashkilotlar va sayohat byurosi oilaning istagini birinchi bo'lib qondirishda raqobatchi hisoblanadilar.

Marketing tamoyillari – bu marketing asosining tub mohiyatini ochuvchi asosiy holatlar, talablar majmuasidir. Marketing mohiyatidan kelib chiqqan holda, quyidagi tamoyillar marketing faoliyatida asosiy hisoblanadi.

1. Iste'molchi – shoh;

2. Ilshlab chiqarilgan mahsulotni sotish yemas, sotiladigan mahsulotlarni ishlab chiqarish:

3. Mahsulot yaratish bilan uning iste'molchisini ham yaratish kerak;

4. Tovar bozorlariga differensiyalashgan holda yondashish kerak;

5. Korxonada iste'molchining talabini qondirish bilangina o'z foydasi va obro'siga ham yega bo'lishi kerak;

Ijtimoiy ahamiyati nuqtai nazaridan to'rtta marketingni muqobil maqsadlarga ajratiladi.

1. Iste'mol darajasini oshirish;

2. Iste'molchilarni qondirilishini maksimallashtirish;

3. Iste'mol tanlovini maksimallashtirish;

4. Turmush tarzini (sifatini) oshirish.

Iste'mol darajasini oshirish ishlab chiqaruvchilar foydasini o'sishga olib keladi, ishlab chiqarishni va xizmatlar sohasini rivojlantirishga, shuningdek ishsizlikni kamayishiga olib keladi.

Iste'molchilarni qondirilganligini maksimallashtirish iste'mol kutayotgan tovar (xizmat) xossalariga to'liq mos kelishiga erishishni ko'zlaydi.

Iste'mol tanlovini maksimallashtirish iste'molchilarga shunday tovar (xizmat)larni turli xillarini ko'rsatib, ularning xodimlariga to'liq mos keluvchi bozorda tovarlarni qidirib topish mumkin bo'lgan tovarlarni mujassamlashtiradi.

Turmush sifatini oshirishda marketing tovarlarni sotish, sifatini ta'minlash va tovar (xizmat) narx bo'yicha maqbul bo'lish emas, balki jismoniy va moddiy jihatdan sifatni anglatadi.

Marketing tamoyillari marketing asosini va uning mohiyatini ochib beruvchi holat, talabdir. Marketingni mohiyati – tovar ishlab chiqarish va xizmat ko'rsatish albatta iste'molchiga, talab ishlab chiqarish imkoniyatlarini doimo bozor talabiga mo'ljallashtirishdan iborat. Marketing mohiyatidan quyidagi asosiy tamoyillar kelib chiqadi:

- iste'molchilarga nima kerak bo'lsa o'shani ishlab chiqarish kerak;
- bozorga tovarlar va xizmatlar taklifi bilan emas, balki iste'molchilarni muammolarini yechish vositalari bilan ishlash;
- tovar ishlab chiqarishni ehtiyoj va talabni tadqiq qilgandan so'ng tashkil etish kerak;
- firmani ishlab chiqarish-eksport faoliyatining oxirgi natijalariga konsentrlashganini kuchaytirish;
- marketing konsepsiyasi vositalarini qo'llash asosida marketing dasturini shakllantirishga olib keluvchi qo'yilgan maqsadlarga erishish uchun kompleks yondoshish va maqsadli dastur uslubini ishlatish;
- tovarni iste'molchiga siljitishni barcha bo'g'inlarini marketing bilan qamrab olish maqsadida bir vaqtni o'zida maqsadli yo'naltirilgan ta'sir asosida bozor talabiga mos keluvchi tovar ishlab chiqarish strategiya va taktikasini qo'llash;
- korxonada faoliyatini va marketing xizmatini bozorda tovar xulq-atvorini bashorat qilishi va strategik rejalashtirishni amalga oshirish asosida samarali kommunikasiyani uzoq muddatli istiqboliga mo'ljallab olish;
- tovarni yashash davrini barcha bosqichlarini ishlab chiqarish va tovar taqsimlashni ijtimoiy va iqtisodiy omillarini hisobga olish;
- tashkilot va tarmoqlar rejasiga nisbatan bozorni birlamchi ekanligini eslash;

- talab va taklifni balanslashtirish maqsadida rejalarni tarmoqlararo koordinasionalash va o'zaro ta'sirini ushlab turish;
- tovar bozori yoki firma imiji (obro'yi) va raqobatli afzallikni qidirish va shakllantirish jarayonida aniq holatda agressivlikka, hujumkorlikka, faollikka intilish, umumiy holda marketingning asosiy tamoyillari – bu bozorni bilish, unga moslashish va bozorga ta'sir o'tkazishdan iborat.

Korxonalar marketing faoliyatida o'tmishdan hozirgi kungacha bo'lgan asosiy maqsad mijozlarga yangi narsa sotib olish uchun yangi sabablarni taqdim etishga ahamiyat qaratilgan. Tabiatan "an'anaviy" bo'lishiga qaramay, segmentasiya-maqsadli-joylashtirish konsepsiyasi, shuningdek, mahsulot-narx-joyrag'batlantirish (4P) modeli global miqyosda zamonaviy marketologlar uchun universal asosiy vositaga aylandi.

Keyinchalik, 2000-yillarda boshlangan marketing transformatsiyasida korxonalar asosiy maqsadi iste'molchilarni brend haqida gapirishga undashdan iborat bo'ldi. Bugungi kunda brend menejment strategiyalari ishlab chiqildi. Texnologiyalarning rivojlanishi asosida marketingning kommunikasiya strategiyalari ham o'zgardi. Bir tomonlama marketing kommunikasiya modellari, raqobat muhiti doirasida ikki tomonlama kommunikatsiya modeliga o'tish boshlandi. Keyinchalik, integratsiyalashgan marketing yondashuvi bilan qo'llaniladigan kommunikasiya kanallari ishlab chiqiladi¹⁵ va diversifikatsiya qilinadi. Marketing o'zining mahsulotga yo'naltirilganligidan insonga qaratilganlik tushunchasiga o'tishi uchun qariyb 70 yil kerak bo'ldi. Evolyutsiyaning so'ngi o'n yilliklari davomida bir nechta marketing tushunchalari vaqt sinovidan o'tdi.

Mahsulotga asoslangan marketingdan (1.0) mijozga yo'naltirilgan marketingga (2.0) keyingi tendensiya esa, insonga yo'naltirilgan marketingga (3.0), marketing 4.0. esa texnologiyalardan foydalanish juda oddiy bo'lsada jismoniy va raqamli kommunikasiya nuqtalarini umumiy marketing konsepsiyalariga birlashtirishga, raqamli transformatsiyaga qaratildi.

Umumun olganda marketing konsepsiyalari mijozlarni va texnologiyalar taraqqiyoti darajasida turli konsepsiyalari shakllandi va rivojlandi.

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*O‘razaliyev Sh.B., Ph.D.
associate professor
Department of Higher Mathematics
Samarkand Institute of Economics and Service
Uzbekistan
Baxtiyorov O.E.
Anorboyev Sh.S.
student
Samarkand Institute of Economics and Service*

MATHEMATICS: THE FOUNDATION OF INNOVATION AND DISCOVERY

Annotation. This article delves into the fundamental role of mathematics in driving innovation and discovery across various disciplines. It explores how mathematical concepts and tools serve as building blocks for advancements in science, technology, engineering, and beyond. The article highlights key historical examples where mathematical breakthroughs paved the way for groundbreaking discoveries, emphasizing the interconnectedness of mathematical theory and practical applications. Furthermore, it examines the ongoing impact of mathematics in shaping cutting-edge fields such as artificial intelligence, cryptography, and data science. By showcasing the profound influence of mathematics on human progress, this article aims to inspire a deeper appreciation for the subject and its potential to unlock future advancements.

Keywords: mathematics, innovation, discovery, science, technology, engineering, Artificial Intelligence, cryptography, Data Science, history of mathematics.

Mathematics, often perceived as a realm of numbers and equations, lies at the heart of countless innovations and discoveries that shape our world. From the intricate workings of modern technology to the vast expanse of scientific exploration, mathematics provides the foundational language and tools for unraveling the complexities of the universe and driving progressive.

Historical Breakthroughs: Throughout history, mathematical advancements have served as catalysts for groundbreaking discoveries. The development of calculus by Newton and Leibniz in the 17th century revolutionized our understanding of motion and change, laying the groundwork for classical physics and engineering. Similarly, the pioneering work of mathematicians like Alan Turing and Claude Shannon in the 20th century paved the way for the digital revolution and the information age. Their theoretical foundations in logic and computation underpin the development of computers, the internet, and countless technological advancements we rely on today.

Shaping Modern Science: Mathematics continues to play a crucial role in modern scientific exploration. Fields such as physics, chemistry, and biology heavily rely on mathematical models and analysis to explain natural phenomena, predict outcomes, and design experiments. For instance, the intricate equations of quantum mechanics provide a framework for understanding the behavior of subatomic particles, while mathematical models in epidemiology help track and control the spread of diseases. The ability to quantify, analyze, and interpret data through mathematical tools is essential for scientific progress and discovery.

Driving Technological Advancements: The impact of mathematics extends far beyond theoretical science, driving advancements in various technological domains. Engineering disciplines, from civil and mechanical to electrical and aerospace, heavily rely on mathematical principles for design, analysis, and optimization. Mathematical models and simulations enable engineers to test and refine designs before physical implementation, leading to safer and more efficient structures, machines, and systems. Furthermore, fields like cryptography and data science, crucial for cybersecurity and information processing, are deeply rooted in mathematical concepts like number theory and statistics.

Emerging Frontiers: As we delve into the complexities of the 21st century, mathematics continues to be at the forefront of emerging fields. Artificial intelligence, a rapidly evolving domain with transformative potential, relies heavily on mathematical tools like linear algebra, calculus, and probability theory. Machine learning algorithms, for instance, utilize mathematical optimization techniques to learn from data and make predictions. Similarly, the development of quantum computing, which promises to revolutionize computation, is deeply intertwined with advanced mathematical concepts in quantum mechanics and information theory.

Inspiring Future Generations: By showcasing the profound impact of mathematics on human progress, we can inspire future generations to embrace the subject and explore its vast potential. Nurturing mathematical curiosity and providing opportunities for exploration can foster a generation of problem-solvers, innovators, and discoverers who will shape the world of tomorrow. Whether it's unraveling the mysteries of the universe, developing groundbreaking technologies, or addressing complex global challenges, mathematics will undoubtedly remain the foundation of innovation and discovery for generations to come.

While specific areas like calculus and statistics often take the spotlight, it's crucial to recognize the interconnectedness of various mathematical disciplines. Number theory, seemingly abstract, underpins modern cryptography; geometry plays a vital role in computer graphics and architectural design; and topology finds applications in network analysis and materials science. This interplay highlights the depth and breadth of mathematical knowledge, where seemingly disparate branches converge to solve real-world problems. Contrary to the perception of mathematics as a rigid set of rules, it thrives on creativity and

ingenuity. Developing new mathematical concepts, proofs, and solutions requires a high degree of imagination and out-of-the-box thinking. This creative aspect of mathematics fuels innovation by allowing us to approach problems from different angles and explore unconventional solutions. The Role of Mathematical Modeling: Mathematical modeling plays a crucial role in various scientific and engineering disciplines. By creating mathematical representations of real-world phenomena, we can analyze complex systems, predict their behavior, and test different scenarios. This ability to model and simulate complex systems is essential for innovation in fields such as climate science, finance, and drug development. Studying mathematics equips individuals with valuable problem-solving skills that extend beyond the realm of numbers and equations. Logical reasoning, critical thinking, and analytical skills honed through mathematical training are essential for tackling challenges in various aspects of life, from personal finance to navigating complex social issues. Fostering a strong foundation in mathematics education is crucial for preparing future generations to thrive in an increasingly technological and data-driven world. Innovative approaches to teaching mathematics, incorporating technology and real-world applications, can spark curiosity and inspire students to explore the power and beauty of the subject. As with any powerful tool, it's important to consider the ethical implications of mathematical advancements. For instance, algorithms used in artificial intelligence and data analysis can perpetuate biases or lead to unfair outcomes if not carefully designed and implemented. It's crucial to ensure that mathematical tools are used responsibly and ethically for the benefit of society. The future of mathematics is filled with exciting possibilities. From exploring the frontiers of theoretical mathematics to harnessing the power of artificial intelligence and quantum computing, mathematicians will continue to play a pivotal role in shaping our world. By embracing interdisciplinary collaboration and fostering a culture of creativity and curiosity, we can unlock the full potential of mathematics to drive innovation and discovery for generations to come.

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Orinbaev A.K.
O'zbekiston Davlat jismoniy tarbiya va sport universiteti
Nukus filiali Sport o'yinlari kafedrasasi
Stajyor-o'qituvchisi

YUQORI MALAKALI AKADEMIK ESHKAK ESHUVCHILARNING JAMOAVIY ESHISH TEXNIKASI SAMARADORLIGINI OSHIRISH

Annotatsiya. Raqobatbardosh eshkak eshish sohasida mukammallikka intilish yutuqlarni tinimsiz ta'qib qilish bilan boshqariladigan doimiy harakatdir. Eng elita akademik eshkak eshuvchilar orasida o'z jamoasining eshkak eshish texnikasini optimallashtirish zarurati katta ahamiyatga ega, chunki ular jismoniy jasoratining to'liq imkoniyatlarini ochishga va misli ko'rilmagan ishlash darajalariga erishish uchun harakatlarini sinxronlashtirishga intilishadi. Ushbu maqola yuqori malakali akademik eshkak eshuvchilar uchun jamoaviy eshkak eshish texnikasi samaradorligini oshirishning murakkabliklarini o'rganadi, ularning muvaffaqiyatlarini yangi marralarga ko'tarish uchun hal qilinishi kerak bo'lgan ko'p qirrali fikrlarni o'rganadi.

Kalit so'zlar: trening darslari, mashg'ulotlar, zamonaviy metodlar, malakali o'qituvchilar, mahoratlar, jamoaviy hamkorlik.

Orinbaev A.K.
trainee-teacher
Department of Sports Games
Nukus branch
Uzbekistan State University of Physical Education and Sports

INCREASING THE EFFICIENCY OF TEAM ROWING TECHNIQUE OF HIGHLY SKILLED ACADEMIC ROWERS

Abstract. In the realm of competitive rowing, the pursuit of excellence is a constant endeavor, driven by the relentless pursuit of marginal gains. Among the most elite academic rowers, the need to optimize their team's rowing technique is of paramount importance, as they strive to unlock the full potential of their physical prowess and synchronize their efforts to achieve unprecedented levels of performance. This article delves into the intricate complexities of enhancing the efficiency of team rowing technique for highly skilled academic rowers, exploring the multifaceted considerations that must be addressed to propel their success to new heights.

Keywords: training classes, training, modern methods, qualified teachers, skills, team collaboration.

Kirish: Texnika jarohatlarning oldini olish va energiya sarfini yaxshilash uchun barcha turdagi sportchilar uchun muhimdir. Biroq, qayiq tezligini ko'rib chiqishda eshkak eshish texnikasi ham katta omil hisoblanadi. Ekipaj jismonan baquvvat bo'lishi mumkin, ammo texnikasi yomon va kuchsizroq ekipaj yutqazishi mumkin, chunki kuchliroq ekipaj o'z kuchidan foydalana olmaydi va qayiqni harakatga keltirishda kuchni samarali qo'llay olmaydi.

Eshkak eshishning o'zi suv transportining boshqa turlari bilan taqqoslaganda noyobdir, chunki qayiq eshkak eshish bilan bir xil yo'nalishda harakatlanadi, eshkak eshish esa samaradorlikka erishish uchun boshqa texnikani talab qiladi. Qobiqni harakatlantirishning ushbu noyob uslubi boshqa suv sportlarida ko'rinmaydigan kuch va nafislik aralashmasini o'z ichiga oladi va shuning uchun texnika sport uchun juda qimmatli komponent hisoblanadi.

Bahor mavsumida eshkak eshuvchilar o'zlarining mehnatsevarligi va fidoyiligini turli regattalarda va chempionat poygalarida sinab ko'rishadi. Aynan shu tadbirlarda jismonan kuchliroq ekipajlar texnik jihatdan ustun ekipajga yutqazishi mumkin.

Eshkak eshishning o'zi juda foydali va qoniqarli sport turi. Yoshdan yoshgacha bo'lgan sportchilar kuch va yurak-qon tomir fitnesini yaxshilashga yordam beradigan sevimli mashg'ulotidan bahramand bo'lishlari mumkin. Keyingi qadamni tashlab, raqobatbardosh eshkak eshuvchilarga aylanadiganlar uchun, xoh u o'quv, kollegial yoki elita darajasida bo'lsin, sport yanada foydali, hozirda u tobora talabchan bo'lib bormoqda. Yuqori malakali eshkak eshuvchilar va sportchilar jismonan sog'lom va texnik jihatdan sog'lom bo'lish uchun son-sanoqsiz soatlarda mashq qilishadi.

Samarali jamoaviy eshkak eshish texnikasining ahamiyati

Ma'lumotlar qayiq tezligini o'rganish uchun ishlatiladi, chunki zarbalar orasidagi tezlik o'zgarishi aniqlanishi va bir vaqtning o'zida kuch ishlatish bilan bog'liq bo'lishi mumkin. Zarbalar orasidagi tezlik o'zgarishini nazorat qilish ekipaj qayiqclarini sinxronlashtirish uchun ham muhimdir.

Ushbu tadqiqot kuch ishlatish va zarba tezligining qayiq tezligiga turli xil zarba tezligida ta'sirini o'rganish orqali insult iqtisodiyoti va qayiq tezligi o'rtasidagi bog'liqlik haqida ko'proq tushunishga qaratilgan. Bu, shuningdek, har xil zarba tezligida poyga qilayotgan ekipajlar uchun zarba texnikasini o'zgartirish nima uchun zarurligini yanada ta'kidlaydi va ma'lum bir qayiq va ekipaj uchun ideal ekipaj armaturasiga qarab kuch qo'llash qanday o'zgarishini ko'rsatishi mumkin. Bu so'nggi Jahon chempionatida Mahe Drysdeyl tomonidan ta'kidlangan: "tezroq insult [tezligi] kaliti siz sekinroq [insult tezligi] ga qaraganda tezroq [yoki qiyinroq] ketmayotgandek taassurot qoldirishdir...".

Martindeyl va Robertson (1984) tomonidan bitta Skull yordamida olib borilgan oldingi tadqiqotlar, uslubning o'zgarishi, zarbani yanada samarali qo'llashga olib kelganligi qayiq va eshkak tezligini oshirganligini aniq ko'rsatdi. Biroq, bu raqobatbardosh darajadagi ekipaj qayig'ida bo'lgani haqida hech qanday adabiyot topilmadi. Eshkak eshish qayig'ini suv orqali harakatlantirishning eng

samarali usulini takomillashtirish orqali, ma'lum bir ekipaj uchun bu raqobatdosh ustunlikka erishish yo'lini ta'minlashi mumkin.

Eshkak eshish zarbasi-bu inson tanasidagi deyarli barcha mushaklar va bo'g'imlarni o'z ichiga olgan murakkab birikma harakati (Martindeyl va Robertson, 1984). Uni to'rt komponentga bo'lish mumkin: ushlar, haydash, tugatish va tiklash. 'Catch' - bu pichoqni haydovchiga tayyor suvga joylashtirish. Drayv qayiqni harakatlantirish uchun eshkak yoki Skull tutqichiga bosim o'tkazishni o'z ichiga oladi. 'Tugatish' - bu pichoqni suvdan olib tashlash va tiklanish-bu ushlar holatiga qaytish. Yuqori zarba tezligida bu harakatlar ketma-ketligini tez va aniq bajarish kerak. Demak, ekipaj o'rtasidagi harakat tejamkorligidagi har qanday kichik buzilish sinxronizatsiya yo'qolishiga va pichoqlar va suv o'rtasidagi aloqaning yo'qolishiga olib keladi, bu esa harakatni kamaytiradi.

Masalaning markazida jamoaviy eshkak eshish individual va jamoaviy harakatlarning nozik muvozanati ekanligi haqidagi asosiy tushuncha yotadi. Puxta o'qitilgan va mukammallikka erishgan har bir eshkak eshuvchi o'zining noyob kuchli va qobiliyatlarini yaxlit birlikka muammosiz birlashtirishi kerak, bu yerda qismlarning yig'indisi butundan kattaroqdir. Ushbu uyg'un integratsiya samarali jamoaviy eshkak eshishning asosidir va bu dinamikani doimiy ravishda takomillashtirish va optimallashtirish murabbiylar va eshkak eshuvchilarning o'zlarining zimmasida.

Jamoaviy eshkak eshish texnikasi samaradorligini oshirishning asosiy yo'nalishlaridan biri bu eshkak eshuvchilar harakatlarini sinxronlashtirishdir. Eshkakning suvga kirish va chiqish vaqti va muvofiqlashtirishidagi eng kichik og'ish qayiqning tezligi va barqarorligiga katta ta'sir ko'rsatishi mumkin. Yuqori malakali akademik eshkak eshuvchilar qat'iy tayyorgarlik va tafsilotlarga sinchkovlik bilan e'tibor berish orqali rivojlantiriladigan tug'ma ritm va vaqt birligini rivojlantirishlari kerak. Bu nafaqat eshkak eshuvchilarning jismoniy harakatlarini sinxronlashtirishni, balki ularning aqliy diqqatini va hissiy uyg'unligini ham o'z ichiga oladi, chunki ular oqim va birlikning jamoaviy holatiga erishishga intilishadi.

Jamoaviy eshkak eshish samaradorligini oshirishning yana bir muhim jihati-eshkak eshuvchilarning individual texnikasini optimallashtirish. Har bir eshkak eshuvchi eshkak eshish mexanikasining mahoratiga ega bo'lishi kerak, to'g'ri ushlar va tanani joylashtirishdan tortib, eshkak orqali quvvatni samarali uzatishgacha. Ushbu individual texnikani takomillashtirish orqali eshkak eshuvchilar jamoaning umumiy samaradorligiga hissa qo'shishi, energiya sarfini kamaytirishi va qayiqning tezligi va sezgirligini maksimal darajada oshirishi mumkin.

Bundan tashqari, ilg'or texnologiyalar va ma'lumotlarga asoslangan tahlillarning integratsiyasi jamoaviy eshkak eshish samaradorligini oshirishda hal qiluvchi rol o'ynaydi. Harakatni ta'qib qilish tizimlari, biomexanik tahlil va real vaqtda teskari aloqa yordamida murabbiylar eshkak eshuvchilar texnikasidagi

nozik kamchiliklarni aniqlashlari va ularni hal qilish uchun maqsadli aralashuvlarni amalga oshirishlari mumkin. Ma'lumotlarga asoslangan ushbu yondashuv jamoaning eshkak eshish texnikasini doimiy ravishda takomillashtirishga imkon beradi va ularning ishlashining har bir jihati doimiy ravishda optimallashtirilishini ta'minlaydi.

Eshkak eshuvchilar orasida kuchli jamoaviy dinamikani va umumiy maqsad tuyg'usini yetishtirish ham bir xil darajada muhimdir. Ishonch, muloqot va o'zaro qo'llab-quvvatlash muhitini rivojlantirish orqali murabbiylar o'z sportchilariga individual va jamoaviy qobiliyatlari chegaralarini oshirishga imkon berishlari mumkin. Ushbu jamoaviy tafakkur jamoaning maqsadlari va strategiyalarini chuqur anglash bilan birgalikda ularning eshkak eshish texnikasi samaradorligiga katta ta'sir ko'rsatishi mumkin, chunki eshkak eshuvchilar umumiy maqsadlariga erishish uchun uzluksiz uyg'unlikda ishlaydi.

Xulosa

Xulosa qilib aytganda, yuqori malakali akademik eshkak eshuvchilar uchun jamoaviy eshkak eshish texnikasi samaradorligini oshirishga intilish har tomonlama va yaxlit yondashuvni talab qiladigan ko'p qirrali harakatdir. Eshkak eshuvchilarning harakatlarini sinxronlashtirishdan individual texnikani optimallashtirishga, ilg'or texnologiyalarni birlashtirishga va kuchli jamoaviy dinamikani yetishtirishga qadar ushbu sportchilarining barcha imkoniyatlarini ochish uchun jarayonning har bir jihatini sinchkovlik bilan hal qilish kerak. Ular inson ishlashining chegaralarini oshirishda davom etar ekan, jamoaviy eshkak eshish texnikasida samaradorlikni izlash hal qiluvchi va doimiy rivojlanayotgan muammo bo'lib qoladi, bu shubhasiz ushbu dinamik va jozibali sportning kelajagini shakllantiradi.

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*Orinbaev A.K.
O'zbekiston Davlat jismoniy tarbiya va sport universiteti
Nukus filiali Sport o'yinlari kafedrasasi
Stajyor-o'qituvchisi*

AKADEMIK ESHKAK ESHISH SPORTIDA SAKKIZ KISHILIK QIZLAR EKIPAJIDA JAMOAVIY HARAKAT TEXNIKASINI MUVOFIQLASHTIRISH

Annotatsiya. Akademik eshkak eshish dunyosida jamoaviy harakat texnikasini muvofiqlashtirish muvaffaqiyat uchun juda muhimdir. Bu, ayniqsa, sakkiz qizdan iborat ekipajda to'g'ri keladi, bu yerda har bir a'zo suvda optimal ishlashga erishish uchun muammosiz ishlashi kerak. Ushbu maqolada biz akademik eshkak eshish bo'yicha sakkiz qizdan iborat ekipajda muvofiqlashtirishning muhimligini, shuningdek, jamoaviy harakatni va umumiy ishlashni yaxshilash uchun ishlatilishi mumkin bo'lgan texnika va strategiyalarni o'rganamiz.

Kalit so'zlar: jamoaviy harakat, eshkak eshish mahorati, malakali o'qituvchilar, yosh sportchilar, sport o'yinlari, strategiyalar.

*Orinbaev A.K.
trainee-teacher
Department of Sports Games
Nukus branch
Uzbekistan State University of Physical Education and Sports*

COORDINATION OF TEAM MOVEMENT TECHNIQUES IN THE CREW OF EIGHT GIRLS IN THE ACADEMIC ROWING SPORT

Abstract. In the world of academic rowing, the coordination of team movement techniques is essential for success. This is particularly true in the crew of eight girls, where each member must work together seamlessly to achieve optimal performance on the water. In this article, we will explore the importance of coordination in the crew of eight girls in academic rowing, as well as the techniques and strategies that can be employed to enhance team movement and overall performance.

Keywords: teamwork, rowing skills, qualified teachers, young athletes, sports games, strategies.

Kirish: Zamonaviy globallashuv sharoitida qo'lga kiritilgan akademik sektor ta'lim, ma'muriyat va tadqiqot jarayonlarida yanada samarali bo'lish uchun tobora ko'proq bosim ostida bo'lib, daromad manbalarini diversifikatsiya qilish

zarurati ortib bormoqda. Shu bilan birga, o'tgan chorak asrda, ayniqsa, yosh aholida jismoniy tayyorgarlikning umumiy darajasining butun dunyo bo'ylab xavotirli pasayishi hujjatlashtirilgan. Sport faoliyatining xilma-xilligi, shuningdek, kadrlar va imkoniyatlarga ega bo'lishdan tortib, jamoat imidjini yaxshilashga va raqobatbardosh muvaffaqiyatga erishish imkoniyatini oshirishga qadar bo'lgan sabablarga ko'ra akademik sohaga o'tishga intiladi.

Yarim murakkab interaktiv jamoaviy sport turlarini muvofiqlashtirish jamoaning muvaffaqiyatiga katta hissa qo'shadigan omil ekanligi ko'rsatildi (Davids va boshq, 2005). Muvofiqlashtirish, shuningdek, paydo bo'lgan funktsional birlik sifatida jamoaning moslashuvchan va barqaror holatlarini shakllantirishga xizmat qiladi. Sport o'yinlari doimiy monitoring va davom etayotgan tuzatishlarni o'z ichiga oladigan murakkab va dinamik tizimi sifatida qaraladi, bu muhim ahamiyatga ega hisoblanadi (gr Rachexhaigne va boshq, 1997). Dinamik naqsh nazariyasiga ko'ra, mahorat dinamik tizimni muvofiqlashtirish fazasi makonida barqarorlik mintaqalariga o'tkazish qobiliyatidir (Kelso, 1995). Buni sportchilar o'rtasida murabbiy yoki tashqi agent ta'sirisiz ma'lum bir harakat tartibiga rioya qilish imkoniyatiga ega bo'lgan o'z-o'zini tashkil qilishni targ'ib qilish orqali amalga oshirish mumkin. O'z-o'zini tashkil etish jamoalarning samaradorligini oshirish bilan bog'liq, ammo bu vosita mahoratini o'rganish bilan taqqoslaganda juda kam o'rganilgan. Sportchining sportdagi ko'rsatkichlari bo'yicha tadqiqotlar odatda sportchining fiziologiyasi va sport texnikasiga qaratilgan (Tyorner, 2002). Ushbu ikki omil sportdagi muvaffaqiyatning asosi sifatida keng tan olingan, chunki ular harakatni ishlab chiqarishga asosiy hissa qo'shadi. Sportchilarning o'zaro ta'siriga oid psixomotor omillarga kamroq e'tibor qaratildi. Biroq, yanada murakkab interaktiv sport turlari individual shakllarni yo'qotayotgani va jamoaga yo'naltirilgan formatlarni egallaganligi sababli, tadqiqotlarni sportchilar o'rtasidagi muvofiqlashtirishni o'rganishga yo'naltirish kerak (Eccles va boshq, 1998).

Avvalo, sakkiz qizdan iborat ekipajda muvofiqlashtirishning ahamiyatini tushunish juda muhimdir. Eshkak eshish-bu qayiqni samarali oldinga siljitish uchun jamoa a'zolari o'rtasida aniq sinxronizatsiya va vaqtni talab qiladigan sport turi. Sakkiz kishilik ekipajga kelsak, har bir eshkak eshuvchi zarba tezligi, quvvatni qo'llash va tanani joylashtirish bo'yicha jamoadoshlari bilan mukammal uyg'un bo'lishi kerak. Ushbu sinxronlashtirilgan harakatdan har qanday og'ish qayiq tezligi va umumiy ishlashning pasayishiga olib kelishi mumkin.

Sakkiz qizdan iborat ekipajda optimal muvofiqlashtirishga erishish uchun har bir jamoa a'zosi muvaffaqiyatning umumiy maqsadiga to'liq sodiq bo'lishi muhimdir. Bu shuni anglatadiki, barcha eshkak eshuvchilar o'zlarining mashg'ulot rejimiga bag'ishlangan, mashg'ulotlar paytida diqqatli va jamoa manfaati uchun qurbonlik qilishga tayyor bo'lishlari kerak. Bundan tashqari, jamoa a'zolari o'rtasida samarali muloqot harakat texnikasini muvofiqlashtirish va musobaqalar va mashg'ulotlar paytida hamma bir sahifada bo'lishini ta'minlash uchun juda muhimdir. Sakkiz qizdan iborat ekipajda muvofiqlashtirishni kuchaytirishning

o'ziga xos texnikasi nuqtai nazaridan, bir nechta asosiy strategiyalarni qo'llash mumkin. Bunday texnikalardan biri bu poyga paytida ekipajning ko'zlari va quloqlari bo'lib xizmat qiladigan zarba tezligi, qayiqning joylashuvi va umumiy strategiya bo'yicha ko'rsatma beradigan koksveyndan foydalanishdir. Koksveyn harakat texnikasini muvofiqlashtirishda va ekipajning birgalikda samarali ishlashini ta'minlashda hal qiluvchi rol o'ynaydi.

Vaqt va ritm:

Samarali muvofiqlashtirishning markazida aniq vaqt va ritm yotadi. Har bir eshkak eshuvchi o'z zarbasini boshqalar bilan sinxronlashtirishi va eshkaklari bir vaqtning o'zida suvga kirishi va chiqishini ta'minlashi kerak. Ushbu murakkab raqs insult tsiklini chuqur tushunishni va jamoadoshlarining harakatlarini oldindan bilish qobiliyatini talab qiladi. Koksveyn, orqa tarafdagi hal qiluvchi yetakchi, ekipajni mukammal birlashtirishga yo'naltirish uchun ularning ovozi va buyruqlaridan foydalanib, tezlik va ritmni belgilashda muhim rol o'ynaydi. Ko'p soatlik mashg'ulotlar orqali eshkak eshuvchilar intuitiv vaqt tuyg'usini rivojlantiradilar, bu ularga qayiq harakatidagi yoki tashqi sharoitdagi har qanday o'zgarishlarga muammosiz javob berishga va moslashishga imkon beradi.

Texnik Sinxronizatsiya:

Vaqtdan tashqari, texnik sinxronizatsiyaga erishish juda muhimdir. Har bir eshkak eshuvchi zarbani aniq texnika bilan bajarishi kerak, ularning pichog'i suvga to'g'ri burchak ostida kirishini, izchil chuqurlikni saqlashini va minimal chayqalish bilan toza chiqishini ta'minlashi kerak. Ushbu texnik aniqlik har bir zarba bilan maksimal quvvat hosil bo'lishini ta'minlaydi va qayiqni samarali oldinga siljitadi. Bundan tashqari, eshkak eshuvchilar insult tsikli davomida to'g'ri tana holatini saqlab, tortishni minimallashtirishi va optimal biomexanik samaradorlikni ta'minlashi kerak. Barcha sakkizta eshkak eshuvchilarda texnik bir xillikka erishish tafsilotlarga sinchkovlik bilan e'tibor berishni, koksveynning doimiy mulohazalarini va jamoa manfaati uchun individual texnikani takomillashtirishga tayyorlikni talab qiladi.

Aloqa va fikr-mulohaza:

Samarali muloqot muvaffaqiyatli muvofiqlashtirishning asosidir. Koksveyn Markaziy kommunikator bo'lib xizmat qiladi va ekipajga tezlik, ritm va boshqarish bo'yicha aniq ko'rsatmalar beradi. Bundan tashqari, eshkak eshuvchilarning o'zlari sinxronizatsiyani saqlash va o'zgaruvchan sharoitlarga moslashish uchun og'zaki signallar va vizual signallardan foydalangan holda samarali muloqot qilishlari kerak. Ochiq va konstruktiv mulohazalar muvofiqlashtirishni yaxshilashda hal qiluvchi rol o'ynaydi. Koksveyn individual va jamoaviy ko'rsatkichlar bo'yicha muntazam fikr-mulohazalarni taqdim etadi, eshkak eshuvchilarning o'zlari esa o'z tajribalari va kuzatuvlari asosida taklif va tuzatishlar kiritadilar. Ushbu doimiy muloqot ekipaj zaif tomonlarini aniqlashi va hal qilishi, ularning muvofiqlashtirilishi va umumiy ishlashini doimiy ravishda takomillashtirishi mumkin bo'lgan o'quv muhitini yaratadi.

Sakkiz qizdan iborat ekipajda muvofiqlashtirishni kuchaytirishning yana bir muhim usuli bu muntazam jamoaviy uchrashuvlar va yig'ilish mashg'ulotlarini o'tkazishdir. Ushbu uchrashuvlar jamoa a'zolariga o'z faoliyatini muhokama qilish, takomillashtirish yo'nalishlarini aniqlash va muvofiqlashtirish va umumiy ko'rsatkichlarni oshirish strategiyasini ishlab chiqish imkoniyatini beradi. Jamoa a'zolari o'rtasida ochiq muloqot va hamkorlikni rivojlantirish orqali ushbu uchrashuvlar eshkak eshuvchilar o'rtasidagi aloqani mustahkamlashga va suvda muvofiqlashtirishni kuchaytirishga yordam beradi.

Bundan tashqari, sakkiz qizdan iborat ekipajdagi har bir eshkak eshuvchi jamoani umumiy muvofiqlashtirishga hissa qo'shish uchun uning individual texnikasi va harakatiga e'tibor qaratishi muhimdir. Bu samaradorlikni oshirish va jamoadoshlar bilan sinxronlashtirish uchun tanani joylashtirish, quvvatni qo'llashga katta e'tibor berishni anglatadi. Shaxsiy mahorat va texnikani takomillashtirish orqali eshkak eshuvchilar ekipajning jamoaviy muvaffaqiyatiga hissa qo'shishlari va suvda umumiy ishlashni yaxshilashga yordam berishlari mumkin.

Xulosa

Xulosa qilib aytganda, akademik eshkak eshish bo'yicha sakkiz qizdan iborat ekipajda jamoaviy harakat texnikasini muvofiqlashtirish suvda muvaffaqiyat qozonish uchun juda muhimdir. Fidoyilik, muloqot va individual texnikani ta'kidlab, eshkak eshuvchilar optimal ishlashga erishish va qayiqni samarali oldinga siljitish uchun birgalikda muammosiz ishlashlari mumkin. Koksvayndan foydalanish va muntazam jamoaviy uchrashuvlar kabi aniq texnika va strategiyalarni amalga oshirish orqali muvofiqlashtirishni yaxshilash va umumiy ishlashni yaxshilash mumkin. Sakkiz qizdan iborat ekipaj muvofiqlashtirish va jamoaviy ishlarga e'tibor qaratib, akademik eshkak eshish raqobatbardosh dunyosida muvaffaqiyatga erishishi mumkin.

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*Otaqulova G.F.
2-kurs talabasi
Ung'arov J.Yo.
assisteti
Jizzax Politexnika institute
O'zbekiston, Jizzax*

QISHLOQ XO'JALIGI MAHSULOTLARINI RAQOBATBARDOSHLIGINI TA'MINLASHDA KLASTER TIZIMINI JORIY QILISH MEXANIZMLARI

Annotatsiya. Ushbu takliflar qishloq xo'jaligida yetishtirilayotgan maqsulotlarni raqobatbardoshligini ta'minlashda albatta klaster tizimini joriy qilish bugungi kunning dolzarb masalasi hisblanadi. Shu nuqtai nazardan ushbu maqolada qishloq xo'jaligi mahsulotlarini raqobatbardoshligini ta'minlashda klaster tizimini joriy qilish mexanizmlari bo'yicha takliflar ishlab chiqilgan.

Kalit so'zlar: raqobat, klaster siyosati, davlat-xususiy sheriklik, intervension klaster siyosati, shartnoma munosabatlari, kooperatsiya, ixtisoslashuv, kontsentratsiya, ishlab chiqarish klasteri, innovatsion klaster, aktsionizatsiya, kooperatsiya yoki klasterlash mexanizmlari

*Otakulova G.F.
2nd year student
Ungarov J.Yo.
assistant
Jizzakh Polytechnic Institute
Uzbekistan, Jizzakh*

MECHANISMS OF CLUSTER SYSTEM IMPLEMENTATION IN ENSURING COMPETITIVENESS OF AGRICULTURAL PRODUCTS

Abstract. These proposals are of course the current issue of the introduction of a cluster system in ensuring the competitiveness of agricultural products. In this regard, this article develops recommendations on the mechanisms for implementing a cluster system to ensure the competitiveness of agricultural products.

Keywords: competition, cluster policy, public-private partnership, intervention cluster policy, contractual relations, cooperation, specialization, concentration, production cluster, innovation cluster, privatization, cooperation or clustering mechanisms.

Kirish. Ko'plab rivojlangan va jahon iqtisodiyotida yetakchi o'rinni egallagan mamlakatlar tajribasi shuni ko'rsatmoqdaki, raqobatbardoshlikni

ta'minlash va dunyo bozorlarida o'rnini topish, birinchi navbatda iqtisodiyotni izchil isloh qilish, tarkibiy o'zgartirish va diversifikatsiya qilishni chuqurlashtirish, yuqori texnologiyalarga asoslangan yangi korxonalar va ishlab chiqarish tarmoqlarining jadal rivojlanishini ta'minlash, faoliyat ko'rsatayotgan quvvatlarni modernizatsiya qilish va texniktexnologik yangilash jarayonlarini tezlashtirish orqali sifatli va raqobatbardosh mahsulot tayyorlashni ta'minlash hisobidan amalga oshirilishi o'z isbotini topmoqda.

O'zbekiston Respublikasi Prezidentining 2019 yil 23 oktyabrdagi "O'zbekiston Respublikasi qishloq xo'jaligini rivojlantirishning 2020-2030 yillarga mo'ljallangan strategiyasini tasdiqlash to'g'risida"gi PF-5853-son farmonida quyidagi choratalbirlarni amalga oshirish masalasiga alohida e'tibor qaratilgan, ya'ni "Kooperatsiya va klaster tizimi asosida mahsulot yetishtirish, uni qayta ishlash, saqlash va ichki hamda tashqi bozorlarga sotish tizimi yo'lga qo'yiladi"[1].

Tadqiqot jarayonida qiyosiy, mantiqiy va abstrakt fikrlash usullaridan foydalanildi. Qishloq xo'jaligi mahsulotlarining raqobatbardoshligi mikroiqtisodiy kategoriya hisoblanadi, shuning uchun ham uning darajasini ko'tarish iqtisodiyotning agrar soha sub'ektlarining manfaatlari in'ikosi hisoblanadi. Qishloq xo'jaligi mahsulotlarini yetkazib berishda raqobatbardoshligining dialektikligi shundan iboratki, aynan unda qishloq xo'jaligi sohasi va davlatning iqtisodiy manfaatlarining birligi, shu bilan birgalikda qarama-qarshiligi ham namoyon bo'ladi. Qishloq xo'jaligi mahsulotlari raqobatbardoshligi milliy iqtisodiyot raqobatbardoshligi nuqtai nazaridan qaraladi, ya'ni bir tomondan, qishloq xo'jaligi mahsulotlari raqobatbardoshligining darajasi ma'lum bir darajada makroiqtisodiyot omillar bilan aniqlansa, ularni tartibga solib turilishi esa davlatning vakolatida bo'ladi. Boshqa bir tarafdin esa, qishloq xo'jaligi mahsulotlarining raqobatbardoshlik o'rnini mustahkamlash umumdavlat iqtisodiy manfaatlar sohasiga qarashli bo'lgan.

Mamlakat hududlarining raqobatbardosh salohiyatini ro'yobga chiqarish maqsadida hududiy-ishlab chiqarish klasterlari tarmog'ini yaratishni, shuningdek mamlakatning hududlarida bir qator yuqori texnologik klasterlarni shakllantirishni nazarda tutadigan uzoq muddatli ijtimoiy-iqtisodiy rivojlanish kontseptsiyasi ishlab chiqilishini taqozo etadi.

Qishloq xo'jaligining tarmoqlararo integratsiyasi bu aksionizatsiya, kooperatsiya yoki klasterlash mexanizmlaridan foydalangan holda birgalikdagi faoliyatni tashkil etishdir. Bugungi kunda yirik xo'jaliklar o'zlarining rivojlanishini aksionizatsiya mexanizmlaridan, o'rta va kichik xo'jaliklar - kooperatsiya va klasterlash mexanizmlaridan foydalangan holda ta'minlamoqda.

Jahon amaliyoti ko'rsatib turibdiki, klasterlar qishloq xo'jaligi korxonalarining raqobat muhitida ishlashining iqtisodiy mexanizmini moslashtirish shakllaridan biri bo'lib, agrosanoat ishlab chiqarishni rivojlantirishni jadallashtirish, ayrim xo'jalik yurituvchi sub'ektlar va qishloq

xo'jaligi mahsulotlarining raqobatbardoshligini oshirish, innovatsion jarayonlarni samarali tashkil etilishini ta'minlash, savdo hajmini kengaytirish maqsadida o'ziga xos iqtisodiy makonni shakllantirish, kapital va resurslardan samarali foydalanish kabilardir.

Klaster hududlarni ijtimoiy-iqtisodiy rivojlantirishda "o'sish nuqtasi" bo'lganligi sababli, qishloq xo'jaligi mahsulotlarini klasterlash agrar sektorning barqaror rivojlanishini ta'minlash va qishloq xo'jaligining raqobatbardoshligini oshirishning asosiy omillaridan biridir. Qishloq xo'jaligining raqobatbardoshligini oshirish bo'yicha agrosanoat klasteri bir qator xususiyatlarga ega:

1. Agrosanoat hududiy klasteri - bu agrosanoat ishlab chiqarish masalalari bilan shug'ullanadigan, geografik jihatdan yetarlicha yaqin bo'lgan bir yoki bir nechta (qishloq xo'jaligiga qo'shni) tarmoqlar (qishloq xo'jaligi mahsulotlarini geografik lokalizatsiya qilish) bilan shug'ullanadigan korxonalar, muassasalar yoki boshqa tashkilotlarning ixtiyoriy birlashmasi.

2. Raqobat ustunligi nafaqat tadbirkorlik sub'ektlari tomonidan, balki ularning hududiy ko'p bosqichli va ko'p tarmoqli birlashmalari tomonidan yaratiladi.

3. Iste'molchilarni zabt etishni alohida qishloq xo'jaligi emas, balki hududiy korxonalar kompleksi - klaster amalga oshiradi.

4. Klaster doirasida resurslarning konsentratsiyasi amalga oshiriladi, ulardan foydalanish barcha ishtirokchilar uchun belgilangan va ular tomonidan qabul qilingan umumiy maqsadga erishishga qaratilgan bo'lib, yagona iqtisodiy va axborot makoni yaratiladi, ishchi kuchini boshqarish, intellektual kapitalni birlashtirish va moliyaviy resurslar bilan o'zaro qo'llab-quvvatlash imkoniyatlari paydo bo'ladi.

5. Klaster sub'ektlari birgalikda davlat organlarida klaster a'zolari manfaatlarini himoya qilishi mumkin.

6. Klaster shakllanishi yangi ish o'rinlarini yaratishi va shu bilan islohotlar va makrotuzilmaviy beqarorlashtirish jarayonlari oldida doimiy ish bilan ta'minlanishi mumkin.

7. Klaster shakllanishlari yuqori darajadagi raqobatbardoshlikka ega, chunki ular quyidagilarga imkon beradi:

- katta hajmdagi mahsulotlarni ishlab chiqarish;
- mustaqil korxonalarga nisbatan barqaror raqobatbardosh ustunliklarni yaratish;
- samarali marketing siyosatini olib borish;
- yuqori malakali kadrlarni tayorlash;
- innovatsion texnologiyalarni joriy etish;
- ekologik toza va sifatli mahsulotlar ishlab chiqarish uchun progressiv sifat standartlaridan foydalanish;
- sinergiya ta'sirida ishlab chiqarish xarajatlari darajasini pasaytirish va ishlab chiqarilayotgan mahsulotlar sifatini yaxshilash, shu jumladan sifat

menejmenti, logistika, muhandislik, axborot texnologiyalari yondashuvlarini birlashtirish;

➤ qishloq xo'jaligi mahsulotlarining jahon bozorlariga chiqish imkoniyati tufayli mahsulotlarni sotish bozorlarini kengaytirish;

➤ bozorda talab va taklif, shuningdek raqobatchilarning yutuqlari to'g'risida ma'lumot olish va almashish uchun samarali tizim yaratish.

Klaster rivojlanishi qishloq xo'jaligi va umuman agrosanoat majmuasining raqobatbardoshligini oshirish omili sifatida zamonaviy innovatsion iqtisodiyotning o'ziga xos xususiyatiga aylanishi mumkin.

Xulosa: Xulosa qiladigan bo'lsak, mamlakatimiz qishloq xo'jaligi uchun klasterlashtirishning afzalliklari quyidagicha bo'lishi maqsadga muvofiqdir:

➤ birlashtirilgan kapitallarni bo'lishish va yangiliklarni tezlashtirish qobiliyati;

➤ resurslardan birgalikda foydalanish, moddiy-texnik ta'minotni sotib olish va saqlashda tejash;

➤ agrosanoat majmuasining har bir alohida korxonasi hududiga, faoliyat ko'lamiga va faoliyatining o'ziga xos xususiyatlariga muvofiq xo'jalikning samarali ixtisoslashuvini aniqlash;

➤ bozorlarni ixtisoslashuvi va faoliyatining imkoniyatlariga muvofiq taqsimlash, samarasiz raqobatni oldini olish;

➤ kooperatsiyadan ko'lamlarni tejash va kichik korxonalar deb nomlangan kamchiliklarni bartaraf etish, ba'zi xarajatlarni kamaytirish;

➤ hamkorlik va sinergiya natijasida erishilgan xatarlarni kamaytirish va taqsimlash;

➤ qishloq xo'jaligi tarmoqlarining raqobatbardoshlik darajasini oshirish;

➤ yakka tartibdagi korxonalar va tarmoq barqarorligini oshirish;

➤ uzoq muddatli, shu jumladan ishlab chiqaruvchi va iste'molchi o'rtasidagi munosabatlarni o'rnatish.

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O'tasheva L.Sh.
Preschool education theory teacher
Termiz State Pedagogical Institute

DEVELOPMENT OF PROFESSIONAL COMPETENCE OF EDUCATORS OF PRESCHOOL EDUCATION ORGANIZATION BASED ON FOREIGN EXPERIENCES

Annotation. In this article, we can learn how to use the experience of preschool teachers in foreign countries, how to conduct activities of preschool organizations in foreign countries.

Key words: foreign experience, psychological aspects, state, society, development, solidarity, community, meaning of life, discipline.

There are very few separate literatures and research works on the study of the best practices of foreign countries in the preschool education and upbringing system, there are only electronic resources of the sources in this regard, which can be found and translated on various websites of the Internet. For example, B. E. Parmonov, I. G'. Mamajonov, R. Mamatov, M. Kh. Qilichova conducted scientific research on this topic. B. E. Parmonov covered the best experiences of foreign countries in the article "Psychological aspects of foreign experiences in raising children in preschool education." In particular, he analytically studied the advanced experiences of countries such as Great Britain, the Russian Federation, Japan, and Germany. I. G' Mamajonov and R. Mamatov have partially included information on the preschool education system in the study of the education system of the German state. In South Korea, kindergarten is not part of general education. Parents send their children to private preschools. Activities in these organizations are conducted in Korean, English, and in some only in English.

Children from 3 to 5 years old are admitted to the kindergarten. The main task of the kindergarten is to create conditions for the comprehensive development of families. Kindergartens mainly offer music, drawing, and math lessons. In Korean kindergartens, great attention is paid to the formation of independence in children. The difference between children's ages can be up to 3 years.

One of the tasks of the administration of a preschool educational organization is to create a favorable moral and psychological climate, an environment of creative interaction and cooperation. The creative work team of educators is able to provide high-level educational work with children and the formation of a creative personality. Research shows that the main role in the development of the educator's creative ability is played by his professional activity and the desire to improve himself. The development of abilities is directly related to the pedagogical skills and abilities that each educator should acquire. It is known that, in fact, pedagogical activity has a creative nature. What is the relationship between professionalism and creativity in the work of an educator?

Perhaps these concepts are synonymous? Creativity is usually described as a process, the result of which is the creation of new material or spiritual values. The novelty criterion can have an objective content (new for a certain field of knowledge) and subjectivity (new for a person - the subject of activity). If creativity prevails in the thinking process, then it manifests itself as imagination (K.K. Platonov). Professional skills of the educator are closely related to creativity. However, these concepts are not synonymous: professionally competent actions are not necessarily the result of the educator's creativity. In teaching, creativity is often seen as a panacea for all diseases, as a dominant that leaves no room for reproductive (reproductive) activity. The first kindergarten in Japan under the leadership of American women was established in Yokohama in 1871, the first Japanese kindergarten in Tokyo in 1894, but the idea of separating the child from the mother so early was not popular. The preschool educational organization should solve the following tasks: help the child to have a good relationship with adults and children, respect nature, adopt a healthy lifestyle, acquire social behavior skills.

Public preschool education is positively evaluated: it helps to bring up an intact child who is able to cooperate with other children. There are also additional schools for gymnastics, swimming, music, dance, art, etc., as well as private kindergartens in schools preparing for admission to their affiliated universities. In addition to daily tasks, teachers must implement additional programs: celebrate the beginning and end of the school year, teach children the rules of behavior on the road and teach them safe life skills, excursions, organizes sports competitions, engages in sports competitions. traditional Japanese exercises in literary creation, celebrating children's birthdays and traditional seasonal and national holidays. Many preschools teach children to play drums and flute, they can participate in marching festivals, and learn numbers and cursive "knan" - this is done at the request of parents. The Japanese pre-school education system works as described above.

Reproductive activity, as a rule, is recognized only as an unwanted, but transition to creativity. The fact that reproducibility in pedagogical activities has a multilevel structure is really underestimated: from vague retelling of knowledge to the ability to adapt the material taking into account many external factors. Reproducibility means the ability to restore their pedagogical activity in changing conditions. A master of pedagogical work is a highly qualified specialist in psychological-pedagogical and current topics, who is able to reproduce professional knowledge, skills and qualifications at a high level. The level of professional skill of the educator depends on his qualifications (pedagogical, social-psychological, differential-psychological), as well as the level of development of professional and pedagogical thinking. Pedagogical creativity is effective if it is based on high professional and pedagogical competence. Unfortunately, in most cases this competence is not available, which leads to didactogenic factors.

True pedagogical creativity corresponds to the objective, not subjective criteria of innovation, the results of creative activity. Even history itself is a witness to this. For example, in Japanese kindergartens, educational programs are also taken into account, in addition to writing and reading, children are taught to sing, sports competitions are held, and they go on regular walks. But in addition to these, the purpose of holding these events is to develop children's sense of harmony and living in a community. The issue of development of creative potential is a process closely related to human psychology. That's why educators and pedagogues play an important role in the life of children of preschool age.

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Qambarova M.X.
mustaqil tadqiqotchi

Андижон қишлоқ хўжалиги ва агротехноогиалар институти

TUT KO‘CHATLARI DOMINANT ZARARKUNANDALARINING RIVOJLANISH FENOLOGIYASI

Annotatsiya. Maqolada Andijon viloyati sharoitida tut ko‘chatlari zararkunandalarining asosiy dominant turlari rivojlanishi fenologiyasi 2021-2023 yillar kesimida olib borilgan tadqiqotlar natijalari tahlili yoritilgan.

Kalit so‘zlar. Insecta qattiq qanotlilar (Coleoptera) turkum buzoqbosh qo‘ng‘izlar (Melolonthane), fenologiya birlamchi zararlanish, mavsumiy dinamika, zararkunanda.

Kambarova M.H.
Andijan Institute of Agriculture and Agricultural Technologies

DEVELOPMENT PHENOLOGY OF DOMINANT PESTS OF SILK BERRY SEEDLINGS

Abstract. The article describes the analysis of the results of the research conducted in the period 2021-2023 on the phenology of the development of the main dominant species of pests of mulberry seedlings in the conditions of Andijan region.

Keywords. Insecta, Coleoptera, Melolonthane, phenology, primary infestation, seasonal dynamics, pest.

O‘zbekiston ipak tolasi yetishtirish bo‘yicha, bugungi kun statistik ma’lumotlariga ko‘ra, jahon mamlakatlari orasida yuqori o‘rinlarni egallab, aholi jon boshiga mahsulot yetishtirish bo‘yicha birinchi o‘rinda turadi. Barcha o‘simliklar kabi, tut ko‘chatlarining ham bir qator zararkunandalari mavjud bo‘lib, ular tutzorlarni kengaytirish vazifasini hal qilishda jiddiy muammolar keltirib chiqaradi. Tut ko‘chatlarining kushandalaridan eng muhimlari bu – tut parvonasi, akatsiya shirasi va ildiz zararkunandalaridir.

Andijon viloyati sharoitida uchraydigan zararkunandalarning tut ko‘chatlariga yetkazadigan zararini kamaytirishda ularning fenologik kalendarini tuzish muhim ahamiyat kasb etadi. Shu sababli biz 2021-2023 yillar davomida ularning fenologik kalendarini tuzish maqsadida Andijon viloyatining Paxtaobod tumani “Muxammadqodir Baxor” hamda “Abdug‘ani –Ziyoiddin” fermer xo‘jaliklarida va Marhamat tumani “Ipak-ko‘chat klasteri“da parvarishlanayotgan tut ko‘chatzorlarida tadqiqotlar olib bordik.

Tadqiqotlar olib borilayotgan hududlarda o‘stirilayotgan tut ko‘chatlarining asosiy zararkunandalari bioekologik xususiyatlarini o‘rganish va

fenokalendar tuzishda B.V.Dobrovolskiy [21] uslubidan foydalanildi. Fenologik kuzatuvlar hasharotlarni rivojlanish muddatlariga bog‘lab, dala sharoitida olib borildi. Fenologik kuzatishlar orqali, havoning o‘rtacha harorati va nisbiy namligini hisobga olgan holda, hasharotlarning tut ko‘chatlarida paydo bo‘lish muddatlari va rivojlanish davrlari belgilandi.

Tajribalarda variantlarni qiyosiy tahlil qilishni osonlashtirish maqsadida boshqa turdagi faktorlar (agrotexnik, mexanik tadbirlar, kimyoviy kurash va hokazo) ta’siri bir xilda olib borilishiga alohida e’tibor berib borildi.

Mart buzoq boshisi (*Melontha afflicta* Ball). Lichinkalik stadiyasida va hali faol hayot kechirishga o‘tmagan qo‘ng‘izlik stadiyasida qishlab chiqqan xasharotlarni Paxtaobod tumaniga nisbatan tuproq namligi yuqoriroq bo‘lgan Marxamat tumanida nisbatan ko‘proq uchradik.

Mart buzoqboshi qo‘ng‘izlari erkaklari mart oyining 2-dekadasidan aprel oyining 3-dekadasigacha uchdi. Mart buzoqboshi qo‘ng‘izi atigi yarim soatdan keyin uchishdan to‘xtaydi.

Qo‘ng‘izlar uchib chiqqandan 2-3 hafta keyin juftlasha boshlaydi. Urg‘ochisi soya joylarga, daraxtlar tagiga, yerning yuza qatlamiga bittadan yoki 2-3 tadan tuxum qo‘ydi. 2-3 sutka mobaynida hammasi bo‘lib 30 tacha tuxum qo‘ydi. Mart buzoqboshi qo‘ng‘izlarining urg‘ochilari yana bir oycha yashab, keyin yana 4-5 ta tuxum qo‘yib o‘la boshladi.

Tuxumlar qo‘yilgandan bir yarim oydan keyin ulardan lichinkalar chiqa boshladi. Lichinkalar faqat kelasi yilda birinchi marta po‘st tashlaydi va shu vaqtdan boshlab daraxtlarning ildizlarini kemirib, sezilarli zarar yetkaza boshlaydi.

Lichinkalari aprel oyining 3-dekadasidan iyun oyining 3-dekadasigacha paydo bo‘ldi. Lichinka va g‘umbaklarni tut ko‘chatlari ekilgan tuproqning 15-20 sm. qatlamlarida tarqalganligini kuzatdik. Lichinkalari chirigan organik moddalar va keyinchalik tut ko‘chatlarining ildizlari bilan oziqlana boshladi.

1-jadval

Mart buzoqboshi qo‘ng‘izining fenologik xaritasi
(Andijon viloyati Marxamat tumani, “Ipak-ko‘chat klasteri“ 2021 yil kuzatuvlari)

Oylar va dekadalar																								
Mart		Aprel			May			Iyun			Iyul			Avgust			Sentabr			Oktabr				
1	2	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3		
o	o	o	o	o																			QISHLASH	
				+	+	+	+	+																
								•	•	•	•	•												
											♦	♦	♦	♦	♦	♦	♦	♦						
															o	o	o	o	o	o	o	o		
1-avlod																								
O‘rtacha harorat, OS																								
12-18		20-24			24-28			26-28			27-30			29-31			18-22							
Havoning nisbiy namligi, %																								

50-60	50-60	46-56	45-55	46-56	52-62	55-65
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Izoh: + - tuxumlari; • - lichinkalari; ♦ - g‘umbaklari; ° - qo‘ng‘izlari

Mart buzoqboshi qo‘ng‘izi 4 yilda bo‘g‘in beradi. Mart buzoqboshi qo‘ng‘izi yozning yarmiga borib g‘umbakka aylandi; o‘sha yozda tuxumdan chiqqan qo‘ng‘izlar faqat kelasi yil ko‘klamida tuproqdan chiqadi.

Fenologik kuzatuvlar hasharotlarning rivojlanish fazalari bo‘yicha taqvim muddatlarga bog‘lab olib borildi. Fenologik kuzatishlar o‘tkazish yo‘li bilan hasharotlar va muayyan turdagi o‘simliklarning paydo bo‘lish muddatlari hamda ularning rivojlanish fazalari belgilanadi. Bunda yil sharoiti va odamning faoliyati ham katta ahamiyatga ega.

Zararkunandalarning ko‘payib ketishiga yo‘l qo‘ymaslik yoki himoya tadbirlarini o‘z vaqtida uyushtirishda fenologik kuzatish natijalari katta yordam beradi. Fenologik ma‘lumotlarga ko‘ra zararkunandalarning yoppasiga urchish vaqtini oldindan aniqlash mumkin. Fenologik kuzatuvlar hasharotlarning rivojlanish fazalari bo‘yicha taqvim muddatlarga bog‘lab olib borildi. Fenologik kuzatishlar o‘tkazish yo‘li bilan hasharotlar va muayyan turdagi o‘simliklarning paydo bo‘lish muddatlari hamda ularning rivojlanish fazalari belgilanadi. Bunda yil sharoiti va odamning faoliyati ham katta ahamiyatga ega.

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OVERCOMING COMMON CHALLENGES IN ENGLISH GRAMMAR AND PRONUNCIATION: TIPS FOR SUCCESS

Abstract. This article explores common challenges encountered by learners in English language acquisition and provides practical tips for overcoming them. By addressing key obstacles such as pronunciation difficulties, grammar complexities, and vocabulary acquisition, learners can enhance their proficiency and confidence in English communication.

Key words: English language acquisition, challenges, pronunciation, grammar, vocabulary, tips, immersive learning, practice, support, success.

Introduction:

Introduction to the significance of English language acquisition in today's globalized world and the prevalence of challenges faced by learners. Proficiency in English language acquisition is increasingly recognized as a valuable skill essential for academic, professional, and social success. However, for many learners, mastering English poses significant challenges that can impede their progress and undermine their confidence. This article aims to explore the common hurdles encountered in English language acquisition and provide practical strategies and tips for overcoming them. As English differs from learners' native languages in pronunciation, grammar, and vocabulary, navigating these differences can be daunting. Pronunciation difficulties often stem from differences in phonetic sounds and stress patterns, making it challenging for learners to articulate English words accurately. Likewise, the complexity of English grammar, including verb tenses, sentence structures, and word order, presents a formidable obstacle for learners to overcome. Additionally, the vastness of English vocabulary poses a challenge in terms of memorization and retention, especially considering the diverse range of words and their nuanced meanings.

Despite these challenges, success in English language acquisition is attainable with the right approach and mindset. By adopting immersive learning opportunities, such as engaging with English-language media and participating in language exchange programs, learners can enhance their exposure to authentic language use and improve their fluency. Consistent practice is paramount in reinforcing language skills, and learners are encouraged to incorporate daily reading, writing, listening, and speaking exercises into their routine. Seeking support and feedback from teachers, language tutors, or language exchange partners can provide invaluable guidance and motivation on the language learning journey.

1. Pronunciation Difficulties:

Pronunciation is often cited as one of the most challenging aspects of learning English, particularly for non-native speakers. The English language contains a wide range of phonetic sounds, many of which may not exist in learners' native languages. Additionally, the stress patterns and intonation in English can vary significantly from other languages, leading to difficulties in articulating words and phrases accurately.

Common pronunciation challenges include:

- Differentiation between similar sounds, such as /θ/ and /ð/ (as in "think" and "this") or /ɪ/ and /i:/ (as in "ship" and "sheep").
- Pronouncing consonant clusters, such as /str/ or /skr/, which may not exist in learners' native languages.
- Mastering English stress patterns and intonation, which can affect the meaning and clarity of speech.

Strategies for improving pronunciation include:

- Practice with phonetic drills to familiarize learners with the sounds of English.
- Listening to native speakers through audio recordings, podcasts, or videos to model correct pronunciation and intonation.
- Utilizing pronunciation apps or online resources that provide interactive exercises and feedback on pronunciation accuracy.
- Engaging in speaking activities, such as role-plays or conversational practice, to apply pronunciation skills in context and receive feedback from peers or instructors.

By addressing pronunciation difficulties through targeted practice and exposure to authentic language use, learners can improve their ability to communicate effectively in English.

2. Grammar Complexities:

English grammar presents learners with a myriad of rules, exceptions, and nuances that can be challenging to master. From verb conjugation to sentence structure, learners often encounter complexities that differ significantly from their native languages. Understanding and applying these rules accurately is crucial for clear and effective communication in English.

Common grammar challenges include:

- Verb tenses: English has a complex system of verb tenses, including past, present, and future forms, as well as perfect and continuous aspects. Learners may struggle to grasp the appropriate usage of each tense and understand the differences in meaning between them.
- Sentence structure: English sentences follow a specific word order (subject-verb-object), but there are variations and exceptions depending on the type of sentence (declarative, interrogative, imperative) and the presence of auxiliary verbs or adverbial phrases.

- Articles and determiners: English articles (a, an, the) and determiners (this, that, these, those) play a crucial role in specifying nouns, but their usage can be confusing for learners, especially those whose native languages do not have similar concepts.

Strategies for mastering grammar complexities include:

- Studying grammar textbooks or online resources that provide clear explanations and examples of grammar rules.

- Practicing grammar exercises to reinforce understanding and application of grammar concepts.

- Analyzing authentic texts, such as articles, essays, or dialogues, to observe how grammar rules are used in context.

- Engaging in communicative activities, such as discussions or writing tasks, to apply grammar knowledge in real-life situations and receive feedback on accuracy.

By actively engaging with grammar concepts and practicing them in context, learners can gradually overcome the complexities of English grammar and become more confident and proficient communicators.

Summary:

Pronunciation difficulties and grammar complexities are two common challenges faced by learners in English language acquisition. Pronunciation challenges arise from differences in phonetic sounds, stress patterns, and intonation between English and learners' native languages. Strategies for overcoming pronunciation difficulties include phonetic drills, exposure to native speakers, pronunciation apps, and speaking practice.

Grammar complexities stem from the intricate system of verb tenses, sentence structures, and grammatical rules in English. Learners often struggle with verb conjugation, sentence order, and the usage of articles and determiners. To overcome grammar challenges, learners can utilize grammar textbooks, practice exercises, analyze authentic texts, and engage in communicative activities.

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Qobiljonov Q.
Buxoro davlat universiteti
Sport nazariyasi va metodikasi kafedrasida o'qituvchisi

JISMONIY TARBIYA DARSLARIDA O'QITISHNING O'QUV-KO'RGAZMALI DIDAKTIK VOSITALARIDAN FOYDALANISHNING AHAMIYATI

Annotatsiya: mazkur maqolada o'qitishning o'quv-ko'rgazmali vositalari, jumladan: real (natural) ko'rgazmali hamda axborotli-tarqatma vositalardan foydalanish va ularning ta'lim samaradorligini oshirishdagi ahamiyati yoritilgan.

Kalit so'zlar: ta'lim, jarayon, didaktik vosita, axborot, ma'lumot, maqsad, natija.

Kobilzhonov K.
lecturer
Department of Theory and Methods of Sports
Bukhara State University

THE IMPORTANCE OF USING TEACHING AND DEMONSTRATION DIDACTICAL TOOLS IN PHYSICAL EDUCATION LESSONS

Abstract. This article outlines the use of educational and demonstration teaching aids, including: real (natural) and information-distributing means, as well as their importance in increasing the effectiveness of education.

Key words: education, process, didactic means, information, goal, result.

Ilmiy va ilmiy texnikaviy axborotlarning keskin o'sishi va tinimsiz rivojlanib murakkablashib borishi ijtimoiy-iqtisodiy hayotni turli sohalarida bo'yicha egallanadigan ma'lumotlarning ilmiy asoslarini o'zlashtirish ehtiyojini yuzaga keltirdi. Bu hol ta'lim, ta'lim jarayonini, ta'lim mazmunini va ularni tashkil etishning shakli, metodi, vositalarini mukammalligini ta'minlash zaruriyatini tug'diradi. Bu zaruriyatni amaliy hal etishning yo'llaridan biri o'quv-tarbiya jarayonini didaktik vositalar majmui bilan yaqindan ta'minlashdir.

Zero, didaktik vositalar ayni paytda tinglovchi-o'quvchining ham eshitish, ham ko'rish organlariga ta'sir etib, ularning o'quv-biluv faoliyatlarini jadallashtirish, o'zlashtirilgan bilimlarni amaliyotga tezroq tadbiiq etish imkonini beruvchi vosita hisoblanadi.

Didaktik vositalar majmui tizimida o'qitishning o'quv-ko'rgazmali vositalari muhim ta'limiy va tarbiyaviy ahamiyat kasb etadi.

Ilmiy-nazariy ma'lumotlar va ta'lim muassasalari tajribasining ko'rsatishicha o'quv-ko'rgazmali vositalar o'qitishning didaktik vositalari

majmui mazmunidagi eng oddiy, eng qulay va qo'llash uchun har tomonlama oson hamda ko'p tarqalgan vositalar hisoblanadi.

O'qitishning o'quv-ko'rgazmali vositalarini ba'zan vizual, ya'ni o'qitishning tovushsiz vositalari deb ham atashadi. Chunki, o'quv-ko'rgazmali vositalarda axborotlar (ob'yekt) tasvirlangan bo'lib, ularda tovush bo'lmaydi. Shuning uchun ham ularni faqat namoyish etish mumkin bo'ladi.

O'qitishning o'quv-ko'rgazmali vositalarini ko'p qo'llanishining yana bir sababi, ular oddiy maktab sharoitida ham tayyorlanishi mumkin. Ularda ma'lumotlar (ob'yekt) qisqa, lo'nda, yo'nalishli, bayon etiladi. Shuning uchun ulardan foydalanish, ularni qo'llash va yaratish juda oson hisoblanadi. Shu o'rinda e'tirof etish joizki, jismoniy tarbiya darslarida o'quv-ko'rgazmali vositalar muntazam faoliyatda bo'lishi, o'qituvchining mavzuli-ishchi rejasida o'z ifodasini topishi uchun ta'lim muassasalarida o'quv-ko'rgazmalari vositalar kartotekasini ishlab chiqish maqsadga muvofiq.

Kartotekada o'quv-ko'rgazmali vositaning nomi, mavzuli-o'quv dasturdagi mavzu raqami, qisqacha mazmuni ifodalanishi darkor. Chunki, bu vositadan aniq vaqtda, aniq mavzuda foydalanishni osonlashtiradi.

O'quv-ko'rgazmali didaktik vositaning juda ko'p turlari mavjud bo'lib, ular o'quv predmetlarining juda ko'p jihatlarini, kunlik turmushimizdagi hodisotlarni, ishlab chiqarish sohalaridagi ayrim lavhalarni aks ettiradi. Ulardan o'rinli foydalanish o'quv predmetining mazmunini qiziqarli, o'quv ma'lumotlarini ta'sirchan, o'quvchilar o'zlashtirish jarayonini samarali qiladi.

O'quv-ko'rgazmali vositalarini tor ma'noda ko'rgazmali vositalar, kengroq ma'noda o'qitishning didaktik vositalari deb atash qabul qilingan.

Axborotni uzatish, muayyan ko'rinishda izohlash nuqtai nazaridan natural o'quv-ko'rgazmali vositalar eng qulay va ko'p qo'llaniladigan vosita hisoblanadi.

Chunki, ularni tabiiy holda ko'rsatish imkoniyatlari katta. Ularni pechatli (chop etilgan) ko'rsatmali vositalar to'ldiradi. Ular mavjud va ularni ta'lim muassasasi sharoitida ham yasash mumkin. O'qitishning hajmli ko'rgazmali vositalari ko'p tarqalgani hamda ularni yaratish imkoniyati mavjudligi uchun ham ular eng qulay o'quv-ko'rgazmali vosita sanaladi.

Bugungi bozor iqtisodi sharoitida ulardan foydalanish faoliyat uchun samarali bo'ladi. Proeksion ko'rgazmali vositalar garchi texnika bilan bog'liqlik tomoni bo'lsada, ular ovozsiz namoyish etilganligi sababli ular ushbu guruhga kiritilgan. Ularni ham tabiiy holatda uncha ko'p mablag' sarflamasdan taxrlash va qo'llash mumkin bo'ladi.

Qayd etib o'tilgan, guruhlardan o'rin olgan o'quv-ko'rgazmali vositalardan foydalanganda, birinchidan, o'quv yurtining shart-sharoitidan kelib chiqish, ikkinchidan, o'quvchilarning ushbu didaktik vositaga munosabatlarini inobatga olish va nihoyat, uchinchidan, ularning samaradorligiga va didaktik jarayonning muhim tamoyillariga tayanish lozim bo'ladi. endi har bir guruhdagi o'quv-ko'rgazmali vositalar mazmui bilan tanishib chiqamiz.

Real (natural) ko'rgazmali vositalar. Jadvalda qayd etilganidek bunday o'quv-ko'rgazmali vositalar, odatda biologiya, zoologiya, ishlab chiqarish mehnati, geografiya fanining ayrim bo'limlari, tasviriy san'at, adabiyot fanining ayrim bo'limlari (sahna asarlari)ni o'rganishda qo'llaniladi. Real (natural) o'quv-ko'rgazmali vositalar, iqtisodiy yo'nalishdagi fanlarni o'qitishda qo'llanilishi ham mumkin. Ammo, ular kam qo'llaniladi, chunki hajmli va chop etilgan (pechatli) o'quv-ko'rgazmali vositalar bu yo'nalish uchun kengroq imkoniyat kasb etadi. Chunki, ular ko'p. Real (natural) ko'rgazmali vositalar ishlab chiqarish jarayoni, mehnat, tabiat fanlarini o'rganish uchun eng ko'p ma'lumot beruvchi vositalar hisoblanadi. O'qitishning bu vositalari bir-birini to'ldiradi va mashg'ulot jarayonida uyg'unlashadi.

Ta'lim samaradorligini oshirishda kolleksiya va doska katta rol' o'ynaydi. Maktab o'quv-ko'rgazmali kolleksiylari deyilganda narsa va jihozlar inobatga olinib, ular muayyan belgilari (o'simlik, sudralib yuruvchi hayvonlar, suvda yashovchi hayvonlar va h.k.)ga qarab tanlab olingan va yangi axborotlarni bayon etish yoxud o'tilganlarni takrorlash, taqqoslash, maqsadida ishlatiladigan vositalar tushiniladi. Kolleksiylalar botanika, zoologiya, kimyo, fizika, amaliy mehnat mashg'ulotlarida ko'proq ma'lumdir. Masalan, o'simliklar kolleksiyasi, plastmassalar, tuzlar, kondensatlar va h.k.larni ko'p uchratish mumkin. Bu kolleksiyalarning ko'pchiligini o'qituvchi o'quvchilar yordamida maktab sharoitida tayyorlash imkoniyatiga ega.

Kolleksiylalar fan kabinetlarida, maxsus jihozlangan xonalarda, karidorlarda osib quyiladi va mavzuni o'rganish jarayonida undan foydalaniladi. Ularni maxsus karobkalarda saqlash, tarqatma material sifatida foydalanish ham mumkin. Ayniqsa talabalarning mustaqil ishlarini yo'lga qo'yish va amalga oshirishda kolleksiylalar katta yordam beradi.

Axborotli-tarqatma didaktik vositalar. Maktab amaliyotida qo'llaniladigan axborotli-tarqatma didaktik vositalar yangi bilim berish, yangi bilimlarni mustahkamlash va o'zlashtirilgan ma'lumotlarni muayyan jarayonda amalga oshirish uchun qo'llaniladi. Axborotli tarqatma didaktik vositalar chop etilgan yoki qo'lda yasalgan bo'lishi mumkin. Bunday didaktik vositalar topshiriq tarzida yoki test vazifasi shaklida qo'llaniladi.

Tajribaning ko'rsatishicha axborotli-tarqatma didaktik vositalarni nazariy mashg'ulotlarda qo'llash imkoniyati katta. Bunda ma'ruzachi mavzuning asosiy yo'nalishlarini bayon etgandan so'ng, ma'ruzadan o'quvchi-talabalarning qanchalik tasavvurga ega bo'lganliklarini aniqlash maqsadida tarqatma didaktik topshiriq tariqasida o'quvchilarga murojaat qilishi va asosiy ma'lumotlarni qay tarzda o'zlashtirilganligini bilib olishi mumkin bo'ladi.

Tarqatma didaktik vositalardan foydalanilganda o'qituvchi muayyan pedagogik qoidalarga rioya qilishi darkor. Bular:

- axborotli-tarqatma didaktik vosita davr talablarini o'zida ifodalaydigan DTS asosida tuzilgan bo'lishi;
- fan xususiyati, o'tilgan mavzu mazmunini o'zida ifodalashi;

- o`quvchi-talabalarda qiziqish, izlanuvchanlik, mustaqillik tuyg`ularini uyg`otishi;

- o`quvchi-talabalarning yoshi (1, 2, 3, 4 – kurs, guruh va h.k.), tayyorgarlik darajasiga mos bo`lib bilimini to`ldirishga ilhomlantira olishi;

- o`tilgan mavzu, bugun o`tiladigan mavzu va kelajakda o`tilishi kerak bo`lgan mavzularni bir-biriga bog`lay olishga xizmat qila olishi darkor.

Qayd etilgan pedagogik talablarga rioya qilish, axborotli-didaktik tarqatma materiallarning mashg`ulot mazmundorligini oshirishiga, auditoriyada ishchanlik kayfiyatini tashkil etishiga va o`quvchi-talabalarning mustaqil ishlashlarini yo`lga qo`yishga hamda shu asosda o`quv axborotlarini puxta o`zlashtirishga katta yordam beradi.

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Qurbanov A.A.
ass.
Jizzax politexnika institute
O'zbekiston

TRANSFORMATORLARNI SONI VA QUVVATI HISOBI

Annotatsiya. Ushbu maqolada ishlab chiqarish korxonalarining elektr energiyaga bo'lgan extiyojidan kelib chiqqan holatda elektr energiya isrofini kamaytirish hamda samaradorlik ko'rsatkichini yaxshilash maqsadida o'rnatiladigan transformatorlarning soni va quvvati taxlil qilingan.

Kalit so'zlar: yuklanish koeffitsiyenti, transformator podstansiyasi, to'la quvvat.

Kurbanov A.A.
assistant
Jizzakh Polytechnic Institute
Uzbekistan

CALCULATION OF THE NUMBER AND CAPACITY OF TRANSFORMERS

Annotation. This article analyzes the number and power of transformers installed in order to reduce the wastage of electricity and improve efficiency in the case of production enterprises' need for electricity.

Key words: load factor, transformer substation, full power.

Korxonaning ratsional elektr ta'minoti tizimini yaratishda BPP va sex podstansiyalaridagi kuch transformatorlarning soni va quvvatlarini texnik va iqtisodiy nuqtai nazaridan to'g'ri tanlash katta ahamiyatga ega. Texnik ko'rsatkichlarga elektr ta'minoti sxemasining ishonchliligi, ekspluatatsiyada qulayligi, jihozlarni uzoq muddatda ishlay olishi, avtomatlashganlik darajasi va x. k. kiradi. Iqtisodiy ko'rsatkichlarni esa asosan boshlang'ich kapital mablag' va yillik sarf-harajatlar kiradi. Korxonaga uchun kuch transformatorlarning soni va quvvatlarini tanlashda ikki yoki ko'p variantlar tahlil qilinib, ulardan eng ma'quli olinadi.

Sanoat korxonalarining elektr ta'minotini yaratishda BPP va sex transformatorlari soni va quvvatini tanlash katta ahamiyatga ega. To'g'ri tanlangan transformator soni va quvvati elektr energiyasi ta'minotining uzluksizligini ta'minlaydi [1,2].

Transformatorlarning soni tanlanayotganda birinchi navbatda ularning elektr ta'minoti ishonchliligi bo'yicha kategoriyalarga ajratishga e'tibor beriladi. Bunda 1-va 2-kategoriya iste'molchilari ikki transformatorli podstansiyadan, 3-

kategoriya iste'molchilari bir transformatorli podstansiyadan ta'minlandilar [3,4,5].

Transformatorlarni iste'molchilarga o'rnatish ham kategoriyaga qarab amalga oshiriladi. Agar bitta transformator podstansiyasi yordamida bir nechta iste'molchilar guruhi ta'minlanayotgan bo'lsa, birinchi navbatda transformator 1- va 2-kategoriyali iste'molchilar joylashgan sexga o'rnatiladi.

Transformatorlarning quvvatini tanlash quyidagi ikki usul bo'yicha amalga oshiriladi [6-11]:

1. Yuklanish koeffitsiyenti usuli. Bu usul bo'yicha transformator quvvatini tanlashda yuklanish koeffitsiyentining kategoriyalar kesimida ruxsat etilgan quyidagi qiymatlariga qarab aniqlanadi.

Yuklanish koeffitsiyentining kategoriyalar kesimida ruxsat etilgan qiymatlari [12]:

I kategoriya – 0,6 dan 0,7 gacha;

II kategoriya – 0,7 dan 0,75 gacha. Ba'zi hollarda 0,85 gacha;

III kategoriya – 0,85 dan 0,95 gacha.

Transformator podstansiyasining yuklanish koeffitsiyenti quyidagi ifoda yordamida aniqlanadi [13]:

$$K_{yu} = \frac{S_{ist}}{n \cdot S_{tr}}$$

bu yerda:

S_{ist} – transformator o'rnatilayotgan iste'molchilar joylashgan sexning to'la quvvati, kVA;

n – elektr ta'minoti ishonchliligi bo'yicha o'rnatiladigan transformatorlar soni (1- va 2-kategoriya iste'molchilari uchun $n=2$ ga, 3-kategoriya iste'molchilari uchun $n=1$ ga teng);

S_{tr} – sexga o'rnatilishi rejalashtirilayotgan transformator quvvati, kVA.

Umuman olganda transformatorlarni normal ish holatida yuklanishi 70-75% bo'lishi kerak. Shu talablar bajarilgandagina transformator o'zining passport ma'lumotlari bo'yicha mo'ljallangan muddatda ishlashi mumkin [14].

2. Normal va avariya rejimlariga tekshirish usuli. Bu usul bo'yicha transformatorlarning quvvati tanlanganda, tanlangan transformator quvvati quyidagi shartlarni bajarishi lozim:

a) Normal ish rejimida: $n \cdot S_{tr} \geq S_{ist}$

b) Avariya ish rejimida: $1,4 \cdot S_{tr} \geq S_{ist}$

Avariya rejimida ifodalangan 1,4 avariya rejimi paytida transformatorni 40%ga o'ta yuklash mumkinligini xarakterlaydi. Transformatorni avariya rejimida o'ta yuklash uchun transformator normal ish rejimida maksimal 93% yuklama bilan ishlagan bo'lishi lozim. Transformatorni o'ta yuklash bir sutkada 6 soatgacha ruxsat etiladi, bu holat 5 sutkadan oshmasligi lozim [15].

Yuqorida ko'rib chiqilgan ikkinchi usul 2 va 3 kategoriya iste'molchilarga ega sexlarga transformator o'rnatilayotganda qo'llaniladi. Sex iste'molchilarini

elektroenergiya bilan ta'minlashda 2 va 3 standart quvvatli transformatorlarni tanlash maqsadga muvofiqdir.

Misol tariqasida TP ga transformator soni va quvvati tanlanadi. TPning umumiy quvvati $S_{TP}=550$ kVA ga teng. Elektr ta'minoti ishonchliligi bo'yicha TP 2-toifali iste'molchi hisoblanadi. Shuning uchun bu TPga ikki transformatorli podstansiya tanlanadi. Bu TP uchun quvvati 400 kVAli 2 ta transformator tanlanadi va yuklanish koeffitsiyentiga tekshiriladi [16].

$$K = \frac{550}{2 * 400} = 0,6875$$

Yuqoridagi hisob natijalari asosida taxlil qilish mumkinki, yuklanish koeffitsiyenti 0,6875 ga teng, qolaversa bu natija yuklanish koeffitsiyenti II-kategoriya hisoblanganligi uchun, yuklanish 68,75 % bo'lganligi hisobiga transformator o'zining pasport ma'lumotlari bo'yicha mo'ljallangan muddatdan ham ko'proq ishlashini taminlaydi. Demak bu TP uchun 2xTM-400/10/0,4 markali transformator tanlanadi. Bu kabi hisob amallarini bajarishda bo'lajak muhandis-elektriklardan kasbiy faoliyatlariga etiborli bo'lish talab etiladi.

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Qurbanova B.Q.
st.o'q.
Jizzax Davlat pedagogika universiteti
Jizzax sh.

ELEKTR YUKLAMA GRAFIKLARINI XARAKTERLOVCHI ASOSIY KATTALIKLARNI TADQIQ QILISH

Annotatsiya. Ushbu maqolada elektr yuklama grafiklarini xarakterlovchi kattaliklar tadqiq qilingan bo'lib, bu orqali sanoat korxonalarining talab koeffitsiyenti, ishlatilish koeffitsiyenti, maksimum koeffitsiyenti va forma koeffitsiyenti yordamida elektr kattaliklar taxlil qilingan.

Kalit so'zlar: talab koeffitsiyenti, ishlatilish koeffitsiyenti, maksimum koeffitsiyenti.

Kurbanova B.Q.
Jizzakh State Pedagogical University
Uzbekistan

STUDY OF THE MAIN QUANTITIES CHARACTERIZING ELECTRICAL LOAD GRAPHS

Annotation. In this article, the quantities characterizing the electric load graphs were studied, through which the electrical quantities were analyzed using the demand coefficient, utilization coefficient, maximum coefficient and shape coefficient of industrial enterprises.

Key words: demand coefficient, utilization coefficient, maximum coefficient.

Yuklamalarni hisoblash va tadqiqot qilishda iste'molchilarning quvvat va vaqt bo'yicha ish rejimini tavsiflovchi yuklamalar grafiklarining koeffitsiyentlaridan foydalaniladi. Bunday koeffitsiyentlar xususiy va guruhiy grafiklari uchun aniqlanib, mos ravishda kichik k va bosh K xarflar bilan belgilanadi.

Talab koeffitsiyenti iste'molchilar guruhiga tegishli bo'lib, u hisobiy yuklamani iste'molchilarning nominal qiymatiga nisbati orqali aniqlanadi [1]:

$$K_{T.a} = \frac{P_x}{P_{nom}}$$

Ishlatilish va maksimum koeffitsiyentlarining ifodalarini hisobga olsak [2]:

$$K_{T.a} = \frac{P_{o'rt.}}{P_{nom}} \cdot \frac{P_x}{P_{o'rt.}} = K_{ish.a} \cdot K_{M.a}$$

shuningdek,

$$K_{T.r} = K_{ish.r} \cdot K_{M.r}$$

Talab koefitsiyentlarining qiymatlari sanoat korxonalaridagi har xil iste'molchilar guruhlar uchun ekspluatatsiya sharoitida tajriba asosida ushbu ifoda orqali aniqlanadi:

$$K_{T.a} = \frac{P_q}{P_{nom}}$$

Bu yerda, P_q – iste'molchilar guruhining qabul qilgan aktiv quvvati. Talab koefitsiyentining har xil iste'molchilar guruhi va korxonalar uchun qiymatlari ma'lumotnomalarda keltirilgan [3].

Ishlatilish koefitsiyenti deganda, o'rtacha aktiv quvvatni nominal quvvatga nisbati tushuniladi va uning miqdori eng ko'p yuklamali smena uchun aniqlanadi:

$$k_{ish.a} = \frac{P_{o'rt.}}{P_n}; K_{ish.a} = \frac{P_{o'rt.}}{P_n} = \frac{\sum_1^n k_{ish.a} \cdot P_n}{\sum_1^n P_n}$$

Bu yerda, p_n, P_n – mos ravishda bir yoki guruh iste'molchilarining nominal aktiv quvvatlari. P_n ni miqdorini takroriy qisqa muddatda ishlaydigan iste'molchilarda ularning pasportlaridan olinadi [4].

P_s, P_s – mos ravishda ayrim guruh iste'molchilarning o'rtacha aktiv quvvat energiya hisoblagichlarining ko'rsatgichi bo'yicha aniqlanadi:

$$P_{o'rt.} = \frac{\mathcal{E}_a}{t_s}; P_{o'rt.} = \frac{\mathcal{E}_A}{t_s}$$

$\mathcal{E}_a, \mathcal{E}_A$ – bir yoki guruh iste'molchilarning qabul qilgan aktiv elektr energiyasi.

T_s – sikl uchun vaqt intervali.

Yuqorida keltirilgan munosabatlarni reaktiv quvvatga ham yozish mumkin [5]:

$$k_{ish.r} = \frac{q_{o'rt.}}{q_n}; k_{ish.r} = \frac{Q_{o'rt.}}{Q_n} = \frac{\sum_1^n k_{ish.r} \cdot q_n}{\sum_1^n q_n};$$

$$q_{o'rt.} = \frac{\mathcal{E}_r}{t_s}; Q_{o'rt.} = \frac{\mathcal{E}_r}{t_s}.$$

Har xil rejimlarda ishlovchi elektr iste'molchilari uchun ishlatilish koefitsiyentlarining o'rtacha qiymati ma'lumotlarda keltirilgan [6].

Quvvat va vaqt bo'yicha ish rejimini tavsiflovchi yuklamalar grafiklarining koeffitsiyentlaridan maksimum va forma koeffitsiyentlarini aniqlash [7].

Maksimum koeffitsiyenti grafikni to'ldirish koeffitsiyentiga teskari bo'lgan miqdor, ya'ni [8]:

$$K_{m.a} = \frac{1}{K_{T.a}} = \frac{P_m}{P_{o'rt.}}; K_{m.r} = \frac{1}{K_{T.r}} = \frac{Q_m}{Q_{o'rt.}}$$

Bu koeffitsiyentning qiymati t yuklamali smena uchun aniqlanadi va guruh iste'molchilariga tegishli bo'ladi. Agar maksimal quvvat deganda hisobiy quvvatni qabul qilinishini e'tiborga olinadigan bo'lsa [9],

$$K_{M.a} = \frac{P_x}{P_{o'rt.}}$$

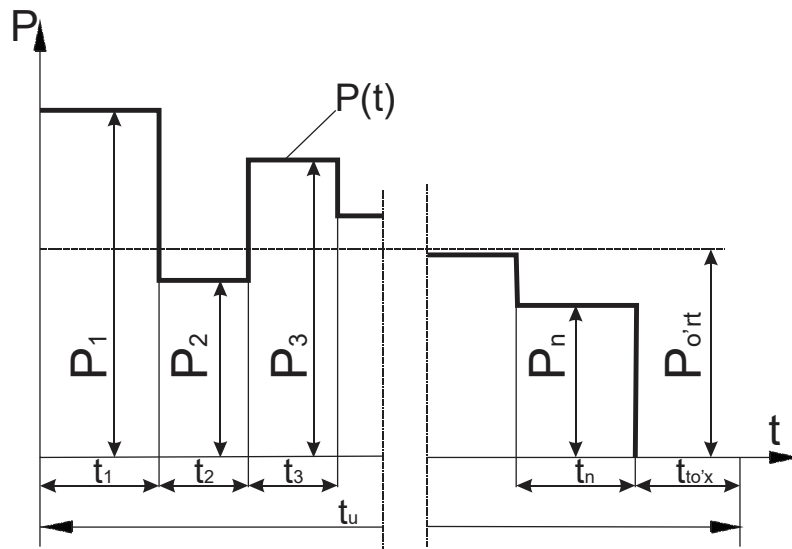
Demak, maksimum koeffitsiyenti grafikdan aniqlanadigan ikki eng asosiy miqdorlar – hisobiy va o'rtacha yuklamalar orasidagi munosabatni belgilaydi. K_m koeffitsiyenti hisobiy quvvatni o'rtacha quvvatga nisbatan qancha kattaligini ko'rsatadi. Uning miqdori birga teng yoki katta bo'lishi mumkin. O'zgarmas yuklamali iste'molchilar (ventilyatorlar, nasoslar va t.u.) uchun $K_m=1$, ya'ni $P_x = P_{o'rt.}$

Forma koeffitsiyenti yuklamaning effektiv (o'rtacha kvadrat) qiymatini uning o'rtacha qiymatiga nisbati bilan aniqlanadi. Bu ko'rsatgich ayrim iste'molchi yoki guruh iste'molchilari uchun ma'lum vaqt oralig'ida topiladi:

$$k_{f.a} = \frac{P_{o'rt.kv.}}{P_{o'rt.}}; K_{F.A} = \frac{P_{o'rt.kv.}}{P_{o'rt.}}$$

$$k_{f.r} = \frac{Q_{o'rt.kv.}}{Q_{o'rt.}}; K_{F.R} = \frac{Q_{o'rt.kv.}}{Q_{o'rt.}}$$

Forma koeffitsiyenti yuklama grafigining vaqt bo'yicha notekisligini ko'rsatadi. Uning eng kichik qiymati, vaqt bo'yicha o'zgarmaydigan yuklamada, birga teng bo'ladi. O'rtacha kvadrat yuklama quyidagi ifoda orqali aniqlanadi:



1-rasm. Yuklama grafingining vaqt bo'yicha notekisligi.

$$P_{o'rt.kv.} = \sqrt{\frac{\sum_{i=1}^n P_i^2 \cdot t_i}{T}} = \sqrt{\frac{\sum_{i=1}^n P_i^2}{n}} \quad Q_{o'rt.kv.} = \sqrt{\frac{\sum_{i=1}^n Q_i^2 \cdot t_i}{T}} = \sqrt{\frac{\sum_{i=1}^n Q_i^2}{n}}$$

Bu yerda, $n = \frac{T}{t_i}$ - yuklama grafingining T vaqt oralig'idagi teng bo'laklar

soni. Forma koeffitsiyenti $K_{f.a}$ ning miqdori ishlab chiqarish jarayoni maromida bo'lgan korxonalarda 1,05 dan 1,15 oralig'ida bo'ladi.

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Qurbanova B.Q.
st.o'q.
Jizzax Davlat pedagogika universiteti
Jizzax sh.

RADIATSIYANING INSON ORGANIZMIGA TA'SIRI

Annotatsiya. Radiatsiyaning odamlarga ta'siri nurlanish ta'siriga uchragan odam tanasining zararlanishi va genetik o'rganning shikaslanishi bilan bog'liq bo'ladi. Radiatsiya inson organizmiga turli xil radiatsiyasi mavjud o'simlik va hayvon mahsulotlari istemoli orqali kiradi. Radionuklidlar asosan inson tanasining turli joylarida – qalqonsimon bez, jigar, suyak va muskul to'qimalarida to'planishi mumkin.

Калум сўзлар: Radionuklid, radiatsiya ta'siri, somatik ta'siri, genetik effektlar, radioaktiv element, inson organizmi.

Kurbanova B.Q.
Jizzakh State Pedagogical University
Uzbekistan

THE EFFECT OF RADIATION ON THE HUMAN ORGANISM

Abstract. The effect of radiation on humans is related to damage to the human body exposed to radiation and damage to the genetic apparatus. Radiation enters the human body through the consumption of plant and animal products containing various radiations. Radionuclides can accumulate mainly in various places of the human body - the thyroid gland, liver, bone, and muscle tissues.

Key words: radionuclide, radiation effect, somatic effects, genetic effects, radioactive element, human organism.

Radiatsiyaning odamlarga ta'siri odatda ikki toifaga bo'linadi. Bular:
1) Somatik (tanaviy) - nurlanish ta'siriga uchragan odamning tanasida paydo bo'ladi.
2) Genetik - genetik apparatning shikastlanishi bilan bog'liq bo'ladi, keyingi avlodlarda namoyon bo'ladi: bular nurlanish ta'siriga uchragan odamning bolalari, nabiralari va uzoqroq avlodlarida namoyon bo'ladi [1,2].

1 Jadval.

Radiatsiya effektlarining odamlarga ta'siri	
Somatik effektlar	Genetik effektlar
Nurlanish kasalliklari	Genning mutasiyasi
Mintaqaviy radiatsiya shikastlanishlar	Xromosomalar aberatsiyasi
Leykemiya (Лейкозы)	
Turli organlarning o'smalari	

Chegaraviy farqlanish (deterministik) va stoxastik effektlar mavjud. Birinchisi, nurlanish natijasida nobud bo'lgan, ko'payish yoki normal ishlash qobiliyatini yo'qotgan hujayralar soni kritik qiymatga etganida, ta'sirlangan organlarning funktsiyalari sezilarli darajada buzilganda paydo bo'ladi. Ta'sirlangan organlarning funktsiyalari buzilishning og'irligining nurlanish dozasi kattaligiga bog'liqligi 2-jadvalda ko'rsatilgan [3].

2 Jadval.

Turli dozadagi nurlanishning inson organizmiga ta'siri	
Doza (nurlanish miqdori), Gr	Radiatsiya ta'sirining sababi va natijasi
$(0.7 - 2) \cdot 10^{-3}$	Yiliga tabiiy manbalardan olingan doza
0.05	Yiliga kasbiy nurlanishlarning maksimal ruxsat etilgan dozasi
0.1	Gen mutatsiya ehtimolligining ikki baravar ko'payishi
0.25	Favqulodda vaziyatda asosli xavfning yagona dozasi
1.0	O'tkir nurlanish kasalligini vujudga keltiradigan dozasi
3- 5	Davolashsiz, ta'sirlanganlarning 50% suyak iligi hujayralarining faoliyati buzilganligi sababli 1-2 oy ichida nobud bo'ladi.
10 - 50	O'lim 1-2 hafta ichida, asosan, oshqozon-ichak traktining shikastlanishi tufayli sodir bo'ladi.
100	O'lim markaziy asab tizimining shikastlanishi tufayli bir necha soat yoki kundan keyin sodir bo'ladi

Butun aholi nafaqat umumiy sog'lom ishlaydigan xodimlarni, balki barcha odamlarni (bolalar, qariyalar va boshqalar) ham o'z ichiga oladi [4].

Radionuklidlar organlarda notekis to'planadi. Inson organizmidagi modda almashinuv jarayonida ular turli hujayra tuzilmalaridagi barqaror elementlarning

atomlarini, biologik faol birikmalarni almashtiradilar, bu esa yuqori lokal dozalariga olib keladi [5-9].

Radiatsiya ta'sirining effekti nurlanish ta'siriga uchragan butunlay boshqa joyda o'zini namoyon qilishi mumkin. Radiatsiya dozasi oshirib yuborish organizmning immunitetini pasayishiga olib keladi va uni turli kasalliklarga moyil bo'lishiga olib keladi. Nurlanish ham zararli shishlar paydo bo'lishi ehtimolini oshiradi [10].

Radionuklidlar tanaga (nafas olish va ovqat hazm qilish organlari), eng kuchli nurlangan organlar shuningdek, qalqonsimon bez va jigarga kiradi. Ularda so'rilgan dozalar boshqa organlar va to'qimalarga qaraganda 1-3 marta kattaroqdir. So'rilgan parchalanish mahsulotlarini konsentratsiyalash qobiliyatiga ko'ra, asosiy organlarni quyidagi qatorda joylashtirish mumkin [7,8]:

qalqonsimon bez > jigar > skelet > mushaklar

Shunday qilib, so'rilgan parchalanish mahsulotlarining 30% gacha, asosan, yodning radioizotoplari qalqonsimon bezda to'planadi.

Radionuklidlar konsentratsiyasiga ko'ra, qalqonsimon bezdan keyin ikkinchi o'rin jigar hisoblanadi. Ushbu organ tomonidan qabul qilingan nurlanish dozasi asosan ^{99}Mo , ^{132}Te , ^{131}I , ^{132}I , ^{140}Ba , ^{140}La radionuklidlarga bog'liq bo'ladi [11].

Texnogen radionuklidlar orasida yod izotoplari alohida e'tiborga loyiqdir. Ular yuqori kimyoviy faollikka ega, biologik siklda faol ishtirok etishga qodir va biologik zanjirlar bo'ylab ko'chib o'tadi, ularning bo'g'inlaridan biri odam bo'lishi mumkin [12].

So'nggi yillarda ionlashtiruvchi nurlanishning inson tanasi to'qimalari bilan o'zaro ta'siri jarayonlari batafsil o'rganilmoqda. Natijada ionlashtiruvchi nurlanishning inson salomatligiga zarari nuqtai nazaridan haqiqiy radiatsiya ta'sirini aks ettiruvchi radiatsiyaviy xavfsizlik standartlari ishlab chiqilmoqda.

Xulosa qilib aytishimiz mumkinki, inson organizmining turli qismlarida har xil radionuklidlar to'planadi. Radionuklidlar asosan inson organizmining qalqonsimon bez, jigar, suyaklar va muskullarda ko'proq to'planadi. Radionuklidlar organizmga asosan radiatsiyali o'simlik va hayvon mahsulotlarini istemol qilish orqali kiradi. Radiatsiya ta'sirida tananing turli qismlarida o'zgarishlar va shishlar paydo bo'ladi. Buning ta'sirida insonda immunitet pasayadi turli kasalliklar, jumladan qalqonsimon bez raki va ko'krak bezi raki kasalliklari paydo bo'lishiga olib keladi.

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Quvvatova M.H.
2nd year graduate student
Termiz University of Economics and Service

EXPRESSION OF FEMALE INTELLECT IN ENGLISH AND UZBEK PHRASEOLOGICAL UNITS

Abstract. In this article, the existence of the image of a woman in literature goes back to the ancient times of folklore. This is especially evident in religious stories. Both in the pre-Islamic period and after it, special attention is paid to the issue of women.

Key words: employee, mayor, deputy, folk proverbs, sociolinguistics.

A.V. Artemova phraseology and proverbs, as a mirror of national culture, embody the national culture, customs, traditions, and a large part of the information in the perception of the world. It is important to study the lexical-semantic level of the concept of "woman", which is widely expressed in proverbs and phraseology.

Phraseologisms and proverbs included in the concept of women perform the function of advice and instruction, and also perform the function of evaluating various qualities and signs of real existence, objects and individuals on the scales of good-bad, moral-immoral, acceptable and unacceptable.

The stereotype of a woman in English language culture consists of the following concepts: attractive appearance, love, touching the ground, family, wife's role, childbirth and child care, household management, raising children, friends. In the Uzbek linguistic culture, the stereotype of a woman is formed from these concepts, with the addition of the role of a bride. This role is one of the leading positions for women.

The gender stereotype of women consists of signs that describe a woman by age, marital status, social status, etc.: woman, girl, mother, sister, daughter, wife, grandmother, aunt, mother-in-law, granddaughter, niece, girlfriend, lady, Mrs. (Mrs. - address to a married woman) / lady, Miss (Miss - address to an untouchable girl) and so on. In both linguistic cultures, the sphere of activity of a woman is limited to the inner space, home and family: lady of the house / housewife; lady of the frying-pan. However, in modern English and Uzbek languages there is a way of expression indicating the professional training of women (not always related to the phraseological layer): adiba woman; female scientist; a hello girl – a telephone operator girl; gaiety girls - variety actress.

In English and Uzbek phraseology, a woman who is in complete control of the family (including the husband) is negatively evaluated: to seize the reins of the husband; the gray mare is a woman who does not leave her husband behind. Phraseologisms that express such a female model are popular in English and are rarely found in Uzbek. This shows that the model of a woman who fully dominates

the land is not acceptable for Uzbek culture, which corresponds to the image of a mute woman who respects and honors her husband.

In the research, not only the phraseological units related to the female intellect, but also in some places the general image of a woman in the English and Uzbek languages.

Let's analyze the following phraseological units with clothing components.

A hat (bonnet) worn only by women also gives the meaning of "bee in one's bonnet" (s.s.: bee in one's bonnet). Or the fact that women wear pants gave rise to the phrase "wear the trousers" and it means being the head of the family. We also have some idioms to talk stupidly about pants, for example, "he laughed at the torn knee with no pants" - that is, this idiom is used to make fun of someone even if he is in a bad condition. Or it means "Don't wear your pants on your head" - don't be ashamed. We can find some phraseological units related to women's skirt in English - to be in petticoat; petticoat government (s.s.: state with a skirt) - a state ruled by a woman. Gloves are another integral part of Western national clothes. Although it is hardly worn today, it served as protection for knights in the Middle Ages. Therefore, the expression "throw down the gauntlet" (s.s.: to throw a knight's glove) gives the phraseological meaning "to call for a fight, to encourage a competition". Literally translated, "a kid gloves" means "kid gloves"

Continuing with the examples: a cat with gloves catch no mice (s.s.: cat with gloves, can't catch a mouse) - sometimes you can't achieve the goal with care and gentleness; an iron fist in the velvet glove (s.s.: iron fist in velvet gloves) - a person who uses a lot of power, despite his gentle appearance; fit like a glove gloves are off (s.s.: gloves are off) - there will be a tough fight.

The English phraseology of a woman of few words refers to the fact that a woman is a woman of few words. Despite being a woman of few words, Sarah was well-respected in her field because of her actions.

In some English phraseological units, it is emphasized that a woman should focus on housework and raising children, as opposed to working outside the home: a woman's place is in the home.

I don't believe that a woman's place is in the home. I love my family, but I also love being a lawyer/I don't believe that a woman's place is at home — I love my family, but I also love being a lawyer.

The following expression is used in relation to very famous and influential, intelligent women in a certain society, in the workplace, in the field: big woman on campus.

I know it's a cliché to say that behind every great man is a great woman, but I can honestly say that I would not be standing here today, accepting this award, without the tireless support of my beautiful wife/ I know it's a cliché to say that behind every great man is a great woman, but to be honest, I wouldn't be standing here accepting this award today if it wasn't for the constant support of my beautiful wife.

In conclusion, we can say that the characteristics of Uzbek women are clearly reflected in folk proverbs. In them, the image of women's hard work, loving mother, faithful and faithful spouse is revealed. The role of women in our society and life is emphasized.

In proverbs, it is considered and glorified as a builder of the family, although it is mainly based on negative aspects. In Turkish culture, a woman is first honored to marry at an early age. Apart from these, the issue of behavior and the way of life in marriage - cooking, neatness are the characteristics expected of women. A woman who is "unvalued" from birth to marriage, begins to be valued as soon as she conceives. Getting married is her first step on this path. Having a child, especially giving birth to a boy, suddenly raises his status in the family.

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*Radjapova G.M.
teacher
faculty of preschool education
Termiz State Pedagogical Institute*

DEVELOPMENT OF CREATIVE ABILITIES OF PRESCHOOL CHILDREN IN PREPARATION FOR SCHOOL EDUCATION

Annotation. In this article, we can learn about the system of work on the development of creative abilities in preparing preschoolers for schooling and how to carry out this work.

Key words: school, creativity, nature, thought, game, art, creativity, complex, leadership, imitation, green school.

It is of particular importance that children of preschool age acquire school knowledge well in the future, adapt to school easily, prevent problems that may arise in the child's personality, and involve children in preschool education organizations and include them in education. According to scientific observations and researches, 70% of all the information that a person receives during his life is taken by the age of 5 years. In fact, during this period, a human child understands the world, learns his mother tongue, develops love for his parents, family, neighborhood, Motherland, and prepares the ground for the knowledge he will acquire throughout his life. The content and methods of preschool education are organized in an environment where the processes of the formation of the child's personality and his recognition as an independent person take place.

The preschool period is the period when the child develops motivation, self-expression, self-development, the ability to apply oneself, the desire to do something, and the desire to do something. During this period, the foundation is created for the development of the child as a person. It is in the pre-school period that universal human qualities are formed that help the child to be successful in all future activities and in life in general. Despite the fact that most of the psychological processes are developing in the form of a child, at each stage it rises to a new level, and the development of creative abilities obeys different laws. And by 5-6 years, reaching the peak of their development, they begin to fall. If, according to the results of these diagnostic methods, preschool children read 90% of the initial answers, by the age of 10 this number will decrease to 20%.

Adults are usually no more than 2%. Thus, if you do not pay attention to creative development, their development may not even stop from the beginning. It's fine to let kids create and play on their own, but sometimes you might want to change how the game works and use more senses in different ways. Give lots of praise for whatever your child does, be it singing or dancing. A holistic approach to education helps develop a child's unique gifts and talents while strengthening

all areas of intelligence. There are opportunities for children to grow emotionally, physically and intellectually through daily learning activities. Classrooms engage children in caring, learning "live" approaches that allow children to become confident problem solvers. Appreciate daily rhythms, which provide a sense of balanced structure, allowing children to feel, know and respond to the next situation. Arrange everything to contribute to the development of "child will" by setting children's perspectives and setting guidelines that teach children to expect.

We contribute to the same qualities in each child's "heart", responsibility, respect and compassion. Social skills are developed based on awareness; children feel warm in the classroom atmosphere, which encourages kindness and compassion, instills a sense of care and concern for themselves and others; we understand that a small child first of all gets acquainted with example and imitation. Ability to improve problem solving and creativity through creative free play. Listening and language learning through stories, music, poetry and fingers, music, everyday circles. Music integrates and harmonizes school life through a curriculum designed to develop each child's natural musicality - singing is integrated into everyday life. Strong and motor skills are enhanced through creative play, yoga, outdoor play, classroom activities, sewing, painting, crafts, art decorating, and writing tools in the oldest classroom.

We recognize that a young child learns primarily by imitation and example. Special attention is paid to creating an environment that contributes to the development of leadership and cooperation in the child's imagination and in the world. This week is rhythmically structured to include storytelling and puppetry, creative work and play, song and creative action, finger plays and games, crafts, artwork and stories. Ways to develop children's creativity are very simple. It is easy to organize them at home, even if the child does not even go to kindergarten or other preschool educational institutions. It requires minimal funds and equipment. Activities performed in this way are interesting not only for children, but also for adults.

Developing creativity and creative thinking in young preschool children is certainly not an easy task. However, parents will be successful if they approach the issue with a sincere desire to show their abilities in childhood. From a psychological point of view, preschool age is a favorable period for the development of creative abilities, because at this age children are very inquisitive, they have a great desire to learn about the world around them. Parents and teachers contribute to the expansion of children's experiences by stimulating curiosity, providing them with knowledge, and involving them in various activities. Accumulation of experience and knowledge is a prerequisite for future creative activity. In addition, the thinking of preschool children is much freer than that of older children. He is not yet "crushed" by stereotypes. Preschool childhood is also a sensitive period for the development of creative imagination. Thus, preschoolers provide excellent opportunities for the development of creativity.

And the creative potential of adults largely depends on how these opportunities were used in childhood. One of the most important factors of creative development of children is to create the following conditions: Early physical development of the child. It should be age appropriate. Creating an environment that is ahead of children's development. As much as possible, it is necessary to surround the child with such an environment and a system of relationships that will stimulate his most diverse creative activity and develop what he is most capable of developing at that moment. efficient. Give the child the opportunity to complete the task on his own, or help him by giving hints rather than ready-made answers and solutions. Giving the child more freedom in choosing an activity, in alternative situations. Don't turn freedom into permission.

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Radjapova M.T.
teacher
Department of Theory of Preschool Education
Termiz State Pedagogical Institute

IMPROVEMENT OF PEDAGOGICAL TECHNOLOGIES OF FORMATION OF DESIGN SKILLS OF PRESCHOOL CHILDREN

Abstract. This article will talk about the development of cognitive interests of preschool older children through design activities. The essence of Cognitive interest and design activities is highlighted.

Keywords: design, cognitive interest, knowledge, skills, qualifications, activity.

The huge opportunities that are being created contribute to the education of the young generation. Special attention to the growing young generation at each educational age indicates that youth education has risen to the level of state policy. Interest in learning, aspiration, enthusiasm, perseverance, enthusiasm, high potential, characteristic of our nation, are qualities that ensure continuity of generations. Meeting the knowledge needs of preschool children and forming their interests is one of the main tasks of educators. Formation of preschool children's interest in learning depends on many factors. One of the main factors is the teacher's ability to organize the lessons in an interesting way for children, to convey them clearly through game activities.

Cognitive interest, its manifestation is associated with the predominance of special forms of activity and a positive affective state arising from the need for external impressions, interaction with the external world and selective attention to it. Preschool psychological characteristics (emotionality, due to the desire to observe, imitate, express one's impressions in play and productive activity), historical information about the objective world as a product of adult activity and the creation of his human thinking deserves special attention. The high emotionality of a preschool child determines the importance of the information received for the further development of the individual.

The development of cognitive interest as a complex personal education gradually takes place in an activity with a practical orientation that allows the child to enter a problem situation. This type of activity, which ensures the possibility of obtaining, synthesizing, combining and actively using information on the subject, is considered a project activity. For a long time, special attention was not paid to the development of educational interests of preschool children in the field of pedagogy. One of the first scientists, such as B.G. Ananyeva, L.N. Bojovich, L.S. Vygotsky, L.A. Wenger, and A.G. Zaporozhets, began to consider cognitive interest as one of the leading motives that encourage children to learn and learn.[4] Their research shows that cognitive interest is formed more

successfully with active cognitive activity. A child's cognitive interest is to learn new things, to determine the qualities and characteristics of objects, the incomprehensible things about real events, to understand their essence, the existing relationships and connections between them. appears in the desire to find.

Currently, various approaches to defining the concept of cognitive interest have been formed. It is considered as follows: - the chosen direction of a person (N.F. Dobrinin, T. Ribot); - manifestation of mental and emotional activity (S.L. Rushinstein); - activator of various emotions (D. Freyer); - a person's specific attitude to the object arising from the consciousness of its vital importance and emotional appeal (A.K. Kovalev); - active cognitive attitude of a person to the world (V.N. Myasishchev); – selected direction of the person to the objects and events of the surrounding world (T. A. Kulikova, N. G. Morozova, G. I. Shukina) [5]. Modern research presents various aspects of the problem of formation of cognitive interest. G. I. Shchukina considers the components of cognitive interest: intellectual, emotional, regulatory and creative processes. A. Vallon analyzes cognitive interest through the prism of emotional attitude to the subject of knowledge. According to him, one of the first objects of knowledge of a small child is the objective world, and the formation of a cognitive attitude to the objective world determines the success of the child's development and largely determines the process of his socialization. The project method has a holistic nature as a means of developing cognitive interest in the history of the objective world. A number of authors consider the project activity as a variant of the integrated method of teaching preschool children, a method of organizing the pedagogical process based on the interaction between the teacher and the student., step-by-step practical activities to achieve the goal (L.S. Kiseleva, T.A.Danilina, M.B.Zuykova).

Others analyze the essence of the project activity, its problematic nature, its place in the educational process. (T.A. Danilina, B.V. Ignatiev, U. Kilpatrick, M.V. Krupenina, N.G. Cherniglov) [5] At the same time, many studies have not sufficiently studied all the potential possibilities of project activity, its role in the development of cognitive interest in objective world history. Preschool children in their psychophysiological development are not yet able to independently create their own projects from beginning to end, so teaching the necessary skills and competencies is the main task of teachers. Therefore, a reasonable and appropriate combination of theory and practice project activity helps to update children's ideas, skills and abilities to independently find and solve problems, stimulates interests, the need for creative activity, creates conditions for cooperation with adults and peers. Psychological characteristics of preschool children cover cognitive, emotional, behavioral areas and allow developing interest in stable knowledge. However, not everything arouses interest in a child, for which it is important to create conditions for the development of cognitive interest. One of the conditions is the use of the most effective teaching methods, which, in my

opinion, includes the method of project activity., teaches to produce an algorithm of its actions to achieve the goal.

An educator is an assistant and consultant for children's independent acquisition of knowledge and skills, therefore, it is not necessary to try everything, but to achieve full disclosure of everything in one project. Everything is done step by step (in stages) must be done; it is necessary to clearly understand what should be required of children based on their individual, age and physiological capabilities. The educator makes conclusions about the overestimated or underestimated self-assessment of the authors of the project individually in the conversation with the children.

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*Rajabova M.Y.
Fan va texnologiyalar universiteti o'qituvchisi*

MAKTABGACHA TA'LIM TASHKILOTLARIDA AQLIY TARBIYANI TASHKIL ETILISHI VA AHAMIYATI

Annotatsiya. Ushbu maqolada maktabgacha yoshdagi bolalarning har tamonlama etuk shaxs qilib tarbiyalashda aqliy tarbiyaning o'rni haqida so'z yuritilgan. Muallif bolalarning aqliy rivojlanishida bilish jarayonlarining muhim ahamiyatini ko'rsatib o'tilgan va yoritilgan.

Kalit so'zlar: Inson, davr, insonparvarlik, axloq, ta'lim, aql, zakovat, o'qituvchi, natija, oila, aqliy tarbiya, donishmandlik, zukkolik, aqliy tajriba, aqliy yetuklik, aqliy faoliyat, aqliy mehnat.

*Rajabova M.Y.
Science and technology
university teacher*

ORGANIZATION AND IMPORTANCE OF INTELLECTUAL EDUCATION IN PRESCHOOL EDUCATIONAL ORGANIZATIONS

Abstract. This article talks about the role of mental education in raising preschool children to become fully mature individuals. The author shows and explains the importance of cognitive processes in children's mental development.

Key words: Man, era, humanitarianism, morality, education, intelligence, intelligence, teacher, result, family, mental education, wisdom, ingenuity, mental experience, mental maturity, mental activity, mental work.

O'sib kelayotgan yosh avlodning ilmiy dunyoqarashini shakllantirish hamma davrlarda bo'lgani kabi, hozir ham millatning ilg'or kishilari diqat markazida bo'lib kelmoqda. Xo'sh, dunyoqarashni o'zini qanday tushunish kerak?

Dunyoqarash-bizni o'rab olgan borliq nima, u qanday rivojlangan, tabiatda qanday inson o'rin tutadi, uning ongi qanday paydo bo'ldi va kamol topdi, jamiyatning yaralish tarixi qanday, insoniyat turmush darajasini qanday qilib yaxshilash mumkin va shu kabi masalalarga kishilarning turlicha qarashlari, munosabatlaridir. Inson o'z faoliyatida malum ilmiy bilimlardan, qonuniyatlardan, tushuncha va g'oyalardan foydalanadi. Ana shu bilimlarga asoslanib, tabiat, jamiyat va inson tafakkuri hodisalarini baholaydi, ularni o'ziga talqin etib, ma'lum xulosalarga keladi.

Aql – keng ma'noda sezish va idrok etishdan boshlanib tafakkur va hayotni o'z ichiga oladigan bilish Jarayonlari yig'indisidir.

Aqliy tarbiya — bu aqlni rivojlantirish maqsadida yoshlarga muntazam va maqsadga muvotiq pedagogik ta'sir ko'rsatish. U yosh avlodning insoniyat

to'plagan bilimlar, malaka va ko'nikmalarda, qoidalarda o'z ifodasini topgan ijtimoiy-tarixiy tajribani egallashning rejali jarayoni sifatida ro'y beradi.

Maktabgacha tarbiya yoshidagi bolalarni aqliy tarbiyalash bolalarning fikrlash faoliyatini rivojlantirishga qaratilgan kattalarning ma'lum maqsad asosidagi ta'sir etishdir. U bolalarga tevarak-atrofdagi olam haqida bilimlar berishni, ularni tizimlashtirishni, bolalarda bilishga qiziqish uyg'otish, aqliy malaka va ko'nikmalarni tarkib toptirishni, bilim qobiliyatlarini rivojlantirishni o'z ichiga oladi.

Maktabgacha tarbiya yoshidagi bolalarni maktabga tayyorlashda aqliy tarbiyaning roli, ayniqsa, kattadir. Chunki aql his-tuyg'ular va idrok etishdan tortib, fikrlash va tasavvur etishgacha bo'lgan jarayonlar yig'indisidir. Bolaga avvalo, kichik yoshdan boshlab, ota-ona tarbiya beradi, keyin tarbiya bilan butun jamoatchilik shug'ullanadi, chunki bunda inson taqdiri hal etiladi deydi.

Sharq va G'arb xalqlari yaratgan og'zaki ijodiyot, buyuk mutafakkir, pedagog va olimlarning ta'lim-tarbiyaga doyr ilg'or fikrlarini o'rganib, tahlil qilib, barkamol insonni tarbiyalash jarayonini o'rganish biz uchun juda qimmatlidir:

— ta'lim-tarbiya to'g'risidagi qonun-qoida tamoyil, metod va usullarni bolalar bog'chalari amaliy hayoti bilan bog'lab, bo'lajak tarbiyachi;

— o'qituvchilarga o'rgatish hamda xalq ta'limini boshqarish va rahbarlik masalalarini chuqur o'rganib, bo'lajak tarbiyachilarni qanday tayyorlash muammolarini hal qilish;

— maktabgacha tarbiya muassasalarida oila bilan uzviy hamkorlikda bolalarni har tomonlama rivojlantirish ishini amalga oshirish. Bunday vazifalarda tadqiq etish:

— birinchidan, bolalar sog'lig'ini saqlaydi va mustahkamlaydi, jismoniy rivojlanishini ta'minlaydi;

— ikkinchidan, ilmga qiziqish va qobiliyatlarini rivojlantiradi;

— uchinchidan, Vatanga, tabiatga, jonajon o'lkaga muhabbat, kattalarga hurmatni, o'rtoqlik va jamoatchilik, xayrixohlik, xulq madaniyati, mustaqillik, uyushqoqlik va intizom, mehnatsevarlik kabi ijobiy fazilatlarni tarbiyalaydi;

— to'rtinchidan, estetik tarbiyani amalga oshiradi. Demak, bilish jarayonida esa bolaning ongi, his-tuyg'ulari shakllanadi.

Eng muhimi ijtimoiy hayot uchun zarur bo'lgan va ijtimoiy munosabatlarga xizmat qiladigan xulqiy odatlar hosil bo'ladi. Maktabgacha yoshdagi bolalarning, yosh va individual xususiyatlarini e'tiborga olgan holda ularning har tomonlama rivojlanishini ta'minlashga xizmat qiladi. Maktabgacha tarbiya muassasalari ham bolalarni har tomonlama tarbiyalaydi. Bola hayotidagi ilk yosh eng muhim davr bo'lib, xuddi mana shu davrda bolaning jismoniy, axloqiy, mehnat, estetik rivojlanishiga poydevor bo'ladi.

Dunyo, inson, aql-zakovat, ma'naviyat-bular bir-biri bilan chambarchas bog'liqdir. Dunyo bunyod bo'libdiki, inson dunyo yuzini ko'ribdiki, o'zini inson sifatida anglabdiki, u o'zini borliqning eng mukammal mavjudoti sifatida aql-

zakovati bilan tanib keladi. Inson ongi, tafakkuri va ma'naviyati tufayli shunday ustunlikka egadir. Inson dunyoga ma'lum bir maqsad bilan kelmaydi. U o'zligini idrok etgandan so'ng hayotda yashashdan ma'no izlaydi va shu narsa uning hayoti mazmunini tashkil etadi. Insonlar bor, dunyoga keladilaru ketadilar, ulardan nom-nishon qolmaydi, hayotning ma'nosiga, qadriga yetmaydilar. Insonlar bor – mana shu kelishi bilan ketishi o'rtasidagi “umr” deb atalmish vaqtga chaqmoqday chaq nab, o'zlarining yorqin izini qoldiradilar. Bu iz o'chmasdir. Mana shunday aql-zakovati bilan o'zidan keyin yaxshi ot qoldiruvchilar ma'naviy yuksak insonlardir. Ma'naviy komil insongina shunday yuksaklikka, avlod-ajdodlar qalbida zamonlar osha, asrlar osha yashashday shara fga sazovordir.

Demak, inson o'z hayoti va faoliyatini mazmunli o'tkazish uchun avvalo o'zini o'rab turgan borliqni bilishi, yuksak aql va tajriba egasi bo'lishi lozim. Chunki inson aqli va uning hayotida muxim o'rin tutishi, aql-idroktufayligina inson donolik, teran fikr, rostgo'ylik, to'g'rilik, uzoqni ko'ra bilish, nafsning ko'yiga tushmaslik kabi hususiyatlarni amalga oshirishi mumkin. Xalqimizning “Aql insonning ko'rki”, “Aql suvdan tiniq, oynaday ravshan” kabi naqlar bejiz aytilmagan. Shuning uchun ham aql inson uchun g'oyat oliy ne'matdir. Aql bilan ilm-ma'rifat egallanadi, kasb xosil qilinadi, dunyo sirlari o'rganiladi. “Aql-yurak ichidagi nur, bu nur bilan haq yoki noxaq bilib olinadi”, “Aql-jonning xayoti, jon esa jasadning hayoti, tan esa jasadning hayoti!”, “Kishining nafsi aqldan ustun bo'lsa, undan odamning hayvondan farqi yo'q”.

Aql kishining o'z irodasi, qalbi va fikri asosida dunyoviy, hayotiy xaqiqatlarni anglash va ularga o'z faoliyatida ma'naviy-insoniy nuqtai-nazardan amal qilishdir. Aql insonlarning piri komili, murshidi, yagonasidir. Rux ishlovi, aql boshlovchidir. Inson aqli ila din va e'tiqodni mahkam qaladi, shariat hukmlariga bo'ysunadi. Insonlarning do'sti uning aqlidir. Dushmani esa uning nodonligidir. «Ollox eng g'azab qilgan kishi ahmoqdir. Chunki u eng aziz narsadan maxrumdir». Olimlarning fikricha, aql ikki turli bo'ladi. Insonni hayvondan ajratib turadigan tug'ma aqli **tabiiy va kasbiy** bu tabiiydir. Inson tabiatdagi aqlni o'tkirlash va o'stirish faoliyati bu kasbiydir. Bu esa aqlni ishlatish, tajriba va ilm olish bilan xosil bo'ladi. U aqlni rivojlantirish uchun ham xar bir kishi xayotdan tajriba orttirish va ilm ma'rifat o'rganishi zarur, xar kimki, aqlga oshno bo'lsa, u jamiki ayblardan poklanadi, xaqiqatni, anglab, kamolotga yetadi.

Aql, zakovat jihatdan yetuk bo'lmagan inson hech qahon o'z Vatanini, o'z dinini, eng asosiysi o'zligini anglay olmaydi, o'zligini anglamagan inson esa manqurtga aylanib qoladi. Bu esa ertangi porloq kelajagimizning halokatidir. Bizning bu boradagi eng asosiy vazifamiz yoshlarni ma'naviy barkamol, elim deb, yurtim deb yonib yashaydigan, yurt istiqboli uchun qayg'uradigan komil insonlarni tarbiyalashimiz, ularni kamol zarur. Komil inson deganda, biz avvalo ongi yuksak, mustaqil fikrlay oladigan, xulq-atvori bilan o'zgalarga ibrat bo'ladigan bilimli odamni oldi-qochdi gaplar bilan aldab bo'lmaydi. Uxar bir narsani aql, mantiq asosida qurgan kishi yetuk odam bo'ladi.

Darhaqiqat ilm-ma'rifalilik kuch-quvvat manbai, qalbga nur, o'ziga ziyo bag'ishlaydigan buyuk ne'matdir. Shu sababli ham inson hayotda qunt bilan ilmni o'rganishi tufayli aql-zakovati yuksaladi, baxtli hayot uchun kurashadi. Bizga ma'lumki, inson hayoti uchun muhim bo'lgan ilm hikmatlarini o'rganishda otabobolarimizning faoliyati va ularning yoshlarga ko'rsatgan g'amxo'rliklari beqiyosdir. Xalqimiz orasidagi quyidagi o'g'itlar insonlarni ilm-ma'rifatga da'vat etuvchi buyuk kuchdir.

Inson uchun aql, eshik ochuvchi, axloqiy yo'l ko'rsatuvchidir. Yetuk axloq vaodobinsonning ziynati, donolarning fazilatidir. Aqlli kishi ahloqli bo'lsagina, xalqiga, mamlakatiga, yoru do'stlariga naf keltiradi. Alisher Navoiy o'zining aqli, ibratli axloqi, odobi bilan mamlakatiga, xalqiga hech qachon so'nmaydigan buyuk meros qoldiradi. U o'zi hayot bo'lgan davrlardayoq, aqli va axloqi bilan xalqiga, mamlakatiga ko'p foyda keltirgan. Aqliy tarbiya insoniyat paydo bo'lgandan boshlab tarbiyaning ustuvor vazifasi bo'lib kelgan.

Pedarogika fanlari nazaruotchi olimlari S.Rajapov, S.Temurova, S.Nurmatova, B.Mirzahmedova, B.Adizov, R.Og'aevlartomonidan aqliy tardiyaning shakllanish usullari va uni amalga oshirish tizimi aqliy tarbiyani shakllantirish to'g'risidagi fikrlari mavzuning o'rganilganlik darajasini belgilaydi.

Insonni ulug'lash, uning kadriga yetish, ayniksa o'sib kelayotgan yosh avlodni aql-idrokli, odobli kilib tarbiyalash, ularni kamolotga yetkazish soxasida Respublikamizda bir kancha ishlarni amalga oshirmokda. Dunyo, inson, aql-zakovat, ma'naviyat-bular bir-biri bilan chambarchas bog'likdir. Dunyo bunyod bo'libdiki, inson dunyo yuzini ko'ribdiki, o'zini inson sifatida anglabdiki, u o'zini borlikning eng mukammal mavjudoti sifatida aql-zakovati bilan tanib keladi. Inson ongi, tafakkuri va ma'naviyati tufayli shunday ustunlikka egadir. Inson dunyoga ma'lum bir maksad bilan kelmaydi. U o'zligini idrok etgandan so'ng xayotda yashashdan ma'no izlaydi va bu narsa uning xayoti mazmunini tashkil etadi. Insonlar bor, dunyoga keladilaru ketadilar, ulardan nom-nishon qolmaydi, xayotning ma'nosiga, kadriga yetmaydilar. Insonlar bor - mana shu kelishi bilan ketishi o'rtasidagi "umr" deb atalmish vaktga chakmokday chaknab, o'zlarining yorkin izini koldiradilar. Bu iz o'chmasdir. Mana shunday aql-zakovati bilan o'zidan keyin yaxshi ot koldiruvchilar ma'naviy yuksak insonlardir. Ma'naviy komil insongina shunday yuksaqlikka, avlod-ajdodlar kalbida zamonlar osha, asrlar osha yashashday sharafga sazovordir. Demak, inson o'z xayoti va faoliyatini mazmunli o'tkazish uchun avvalo o'zini o'rab turgan borlikni bilishi, yuksak aql va tajriba egasi bo'lishi lozim. Chunki inson aqli va uning xayotida muxim o'rin tutishi, aql-idrok tufayligina inson donolik, teran fikr, rostgo'ylik, to'grilik, uzokni ko'ra bilish, nafsning ko'yiga tushmaslik kabi xususiyatlami amalga oshirishi mumkin. Xalkimizning "Aql insonning ko'rki", "Aql suvdan tinik, oynaday ravshan" kabi naqlar bejiz aytilmagan. Shuning uchun ham aql inson uchun goyat oliy ne'matdir. Aql bilan ilm-ma'rifat egallanadi, kasb hosil kilinadi, dunyo sirlari o'rganiladi. "Aql - yurak ichidagi nur, bu nur bilan haq yoki nohaq bilib olinadi",

“Aql o'z soxibini dunyo malomatlaridan kutkaradi”, “Aql- jonning xayoti, jon esa jasadning xayoti, tan esa jasadning xayoti!”, “Kishining nafsi aqldan ustun bo'lsa, unday odamning xayvondan farqi yo'k“.

Aql kishining o'z irodasi, kalbi va fikri asosida dunyoviy, xayotiy haqiqatlarni anglash va ularga o'z faoliyatida ma'naviy-insoniy nuqtai-nazardan amal kilishdir. Aql insonlarning piri komili, murshidi, yagonasidir. Rux ishlovi, aql boshlovchidir. Inson aqli ila din va e'tikodni maxkam kiladi, shariat xukmlariga bo'ysunadi. Insonlarning do'sti uning aqlidir. Olimlarning fikricha, aql ikki turli bo'ladi. Insonni xayvondan ajratib turadigan tugma aqli Tabiiy va kasbiy bu tabiiydir. Inson tabiatdagi aqlni o'tkirlash va o'stirish faoliyati bu kasbiydir. Bu esa aqlni ishlatish, tajriba va ilm olish bilan hosil bo'ladi. U aqlni rivojlantirish uchun ham har bir kishi xayotdan tajriba orttirishi va ilm-ma'rifat o'rganishi zarur, har kimki, aqlga oshno bo'lsa, u jamiki ayblardan poklanadi, haqiqatni, anglab, kamolotga yetadi.

Bolalarning aqlli bo'lishida oila, maktab, keng jamoatchilikning ta'siri kattadir. Aqlli bolalar qayerda bo'lmasinlar doimo ehtiyotkorlik bilan bilim va tarbiyali ekanligini namoyish etadilar.

Alisher Navoiy qanoatni to'ldiruvchi insoniy fazilatlar sabr, saxiylik, karam, muruvvat, himmat ekanligi ta'kidlab o'tadi. Mazkur xislatlarning bir-biriga yaqinligi hamda ularni insonning obro'-e'tiborini yuksak darajaga ko'tarishga xizmat qiluvchi xislatlar sanalishini aytib o'tadi. Ayni o'rinda sabr deb ataluvchi xislatga shunday ta'rif beradi: “Sabr achchiqdir – ammo foyda beruvchi, qattiqdir – ammo zararni daf etuvchi. Sabr shodliklar kalitidir va bandlar ochqichidir.

Alisher Navoiyning talqinicha, saxiylik, saxovat odamlarning mushkulini oson qilish maqsadida ularga beriladigan minnatsiz yordamdir. Alloma insonlarni bir-birlariga nisbatan saxovat ko'rsatishga da'vat etadi. Himmatlilik, muruvvat, karam kabi xislatlar esa saxovatning tarkibiy qismlari hisoblanadi. Ushbu fazilatlarga ta'rif berar ekan, mutafakkir quyidagi fikrlarni qayd etadi: “Saxiylik (qo'li ochiqlik) kishilik bog'ining hosildor daraxtidir, balki u daraxtning shirin mevasidir, odamgarchilik o'lkasining to'lqinli daryosi, balki u to'lqin daryosining asl gavharidir.

Yaxshilik – bir jabrlanganning qattiqchilik yukini ko'tarmoq va uni o'sha qiyinchiliklardan qutqarmoqdir. Karam birovning mashaqqat tikani og'irligini ko'tarmoq va tikan uchidan guldek ochilmoq va o'sha qilingan ishni qaytib tilga keltirmaslik, og'ziga olmaslik, kishiga minnat qilmaslik va uning yuziga solmaslik”. “Muruvvat karamning urug'-avlodi, egizak qarindoshi, kimki bu xislatlarga ega bo'lsa izzat va hurmatga sazovor bo'ladi” kabi fikrlar asosida esa muruvvat deb ataluvchi xislatga ta'rif beriladi. Alisher Navoiy karam va muruvvat sifatlarini ota-onaga qiyoslasa, vafo va hayoni esa egizak farzandlardir deya ta'kidlaydi.

Abdulla Avloniy esa inson aqliy kamoloti xususida to'xtalar ekan, quyidagilarni bayon etadi: «Ilm dunyoning izzati, oxiratning sharofatidir. Ilm

inson uchun g'oyat muqaddas bir fazilatdur, zeroki, ilm bizga o'z ahvolimizni, harakatimizni oyna kabi ko'rsatur, zehnimizni, fikrimizni qilich kabi o'tkir qilur, ilmsiz odam mevasiz daraxt kabidur». Alloma bilim insonni jaholatdan qutqarishning eng samarali vositasi ekanligiga ham urg'u beradi: «Ilm bizni jaholat qorong'usidan qutqarur, madaniyat, ma'rifat dunyosiga chiqarur, yomon fe'llardan, buzuq ishlardan qaytarur, yaxshi xulq, odob sohibi qilur. Bugun hayotimiz, salomatligimiz, saodatimiz, sarvatimiz, maishatimiz, himmatimiz, g'ayratimiz, dunyo va oxiratimiz ilmga bog'liqdur».

Abdurahmon Jomiy o'zidan keyin turli fan, adabiyot, jumladan pedagogikaga doir o'lmas meros qoldiradi. U o'z asarlarida, ayniqsa, nasriy yo'lda yozilgan "Baxoriston" asarida ta'lim-tarbiya masalalari xususida fikr bildirdi.

Jomiyning fikricha, ilm inson uchun xayotiga yo'l ochuvchi va uni o'z maqsadiga erishtiruvchi omildir. Ilm va hunarni yoshlikdan egallash kerak. Ilm insonga hamma narsani oson va puxta anglab olishga yordam beradi, mehnatni yengillashtiradi. Jomiy yoshlarni ilmlarni egallashga da'vat etdi:

Jomiy o'z pedagogik qarashlarida kishilarni adolat, xushmuomalalik va dono so'z bilan zulmkorlarga ta'sir etishga da'vat etadi. Yuqoridagi misralarda qilingan nasihat da'vat garchi shoxlarga qaratilgan bo'lsa ham, xar bir ish va xolatda tadbir va aql bilan ish tutish, do'stlarga yaqinroq bo'lish, yomonlik qilishdan saqlanish, adolatli bo'lish xar bir insonga qarata qilingan xitobdir. Jomiy manmanlik, kekkayishlarni qoralaydi, g'ururlikni nodonlikning belgisi deb biladi. Inson xatto, boshqalardan biror sifati bilan yuqori darajali bo'lsa ham, kamtar bo'lishi kerak deydi.

Jomiy manmanlik nodonlik belgisi ekanligini uqtirib, yoshlarni bu illatlardan xoli, pok bo'lishga undaydi. Jomiy to'g'ri so'zlikni inson uchun zaruriy eng yaxshi xususiyat hisoblaydi, izxor etiladigan fikr so'z va harakat bilan uzviy birlikda bo'lmog'i kerak. Shoirning ta'kidlashicha, dilkashlik, shirinso'zlik, ochiq chexralik va quvnoqlik kishilarga yaxshi, yoqimli kayfiyat baxsh etadi. Ulug' adib o'z asarlarida hasislikni, o'grilikni keskin qoralaydi, oqilona yashash, ortiqcha boylikni muhtojlarga berish, qanoatli bo'lish g'oyalarini olg'a suradi.

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Rajabov Ya.J.
“Qishloq xo’jaligi va chorvachilik texnika-texnologiyalari”
kafedrasi v.b. dotsenti, t.f.f.d.,
Rajabov U.Ya.
“TIQXMMI” milliy tadqiqot universiteti
Buxoro tabiiy resurslarni boshqarish instituti tayanch doktoranti
Rajabova N.Ya. “TIQXMMI” milliy tadqiqot universiteti Buxoro tabiiy
resurslarni boshqarish institute talabasi
G’afforova D.
QXM 2/1/ gruh talabasi

BUXORO VILOYATI SHAROITIDA EKIN YERLARINI TUPROQ OSTIDAN SUG‘ORISH (TOS) LABORATORIYA-DALA QURILMASI

Annotatsiya. Maqolada ekin yerlarning tuproq ostidan sug‘orib suv tejankorligiga erishish borasida olib borilayotgan ilmiy tadqiqot ishlari, qo‘llaniladigan texnika va texnologiyalar, yangi qurilma, uni qo‘llashda olinadigan ijobiy natijalar, shuningdek bu muammo echimini topish borasida ilmiy tadqiqot ishlari to‘g‘risida ma’lumotlar keltirilgan.

Kalit so‘zlar: Tuproq ostidan sug‘orish, qumli tuproq, sho‘rlangan tuproq, gravitatsion kapillyar, sorbsiyali, kondensatsion, gidrostatik bosim.

Rajabov Ya.J., Ph.D.
v.b. associate professor
Department of "Agriculture and Animal
Husbandry Techniques and Technologies"
Rajabov U.Ya.
PhD student
Bukhara Institute of Natural Resources Management
National Research University "TIQXMMI"
Gaffarova D.
student of QXM 2/1/ group

UNDERGROUND IRRIGATION (TOS) LABORATORY-FIELD DEVICE IN THE CONDITIONS OF BUKHARA REGION

Abstract. In the article, the scientific research works on achieving water saving by subsoil irrigation, the used techniques and technologies, the new device, the positive results obtained from its application, as well as the scientific research works on finding a solution to this problem are presented. information is provided.

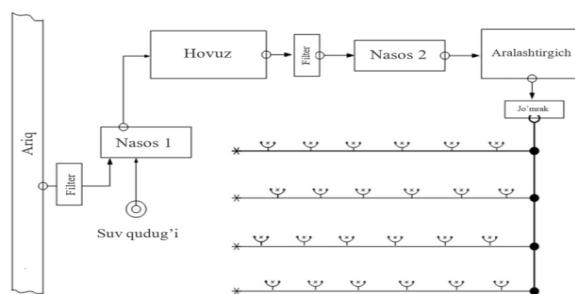
Key words: Subsoil irrigation, sandy soil, saline soil, gravitational capillary, sorption, condensation, hydrostatic pressure.

Respublikamizda paxta ekinlarni tuproq ostidan ildiz tizimini namlab sug'orish texnologiyasining deyarli yo'qligi va tadqiqot maqsadidan kelib-chiqib, TOS texnologiyasi konstruktiv sxemasi ishlab chiqildi (1-rasm). Bunda er usti yoki er osti suvlarini nasos yordamida so'rib hovuzga quyiladi, ma'lum vaqtdan keyin tindirilib filtirlardan o'tkazib nasos yordamida so'rib olinib o'g'it aralastirgich yordamida mineral o'g'itlar aralastiriladi va suv bosimi 0,5...1,5 metr suv ustini ostida asosiy polietilen quvurga yuboriladi undan ingichka quvurlarga va undan TOSE ga beriladi. TOSE dan soatiga o'rtacha 2-2,5 l suv sizib chiqadi.[1,2,3].

TOS sug'orish tizimi va uning tarkibiy qismlari. TOS tizimi mohiyatiga ko'ra, tarkibiga suv saqlovchi, organik o'g'it qo'shuvchi, suv tozalovchi, suv etkazib beruvchi, suv taqsimlovchi va namlab sug'oruvchi qismlarni o'z ichiga oladi. Tizimning qismlari joylashgan o'rni, ishlatadigan suvi sifatiga ko'ra, tizim tarkibiga kiruvchi elementlar turi va soni har xil bo'lishi mumkin. Tizimning suv saqlovchi qismi - hovuz, tindirgich yoki sisternalardan, suv tozalovchi qismi - qumli, diskli yoki turli filtrlardan, suv etkazib beruvchi qismi - nasos qurilmalari, bosh va tarqatuvchi quvurlardan, suv rostlovchi qismi - turli rostlagichlar, ilashmalar va jo'mraklardan, sug'oruvchi qismi – aylana shaklidagi namlatgichdan tashkil topgan.

TOS tizimi zamonaviy sug'orish tizimi hisoblanib odatdagi an'anaviy elementlar bilan bir qatorda suv sarfini hisobga oluvchi suv o'lchagichlar, tuproq namligini nazorat qiluvchi datchiklar va tizimni avtomatik ravishda boshqaruvchi kompyuter vositalaridan foydalanish imkoniyati ham mavjud va tuproq ostidan namlatib berish orqali sug'oriladi bunda suvning tozaligi sug'orish ishchi qisimlarining uzoq vaqt xizmat qilishini ta'minlaydi. Shu sabab suvni tozalash filtrlarini to'g'ri tanlab bilish zarur. Sug'oriladigan paxta ekinzorlari uchun ajratiladigan maydon tekis bo'lishi va uni nishabi 4-5 % dan oshmasligi lozim. Bu maydonlarning hammasi shamoldan himoyalangan bo'lishi lozim.

Quyida Buxoro-10 paxta navini tuproq ostidan sug'orishni sxemasi keltirilgan



1-rasm Buxoro-10 paxta ekinini TOS tizimi sxemasi.



2-rasm Buxoro-10 paxta ekinini TOS tizimida ekilgan jarayon

Ushbu sug'orish sxemasi ariq, filtr, nasos 1, suv qudug'i, hovuz, nasos 2, mineral o'g'itlarni aralashtiradigan aralashtirgich, jo'mrak, suv taqsimlovchi va sug'oruvchi politelen quvurlar, suv beruvchi elementlardan tashkil topgan.

TOS qurilmasini o'rnatish sxemasi, uning ishlash texnologik jarayoni va texnik tavsifi. TOS texnologiyasini qo'llashda nasos uskunalari va yig'iladigan quvurlarni tanlash mahalliy sharoitga muvofiq individual ravishda amalga oshiriladi va nasos stansiyasini tanlash, yig'iladigan quvur liniyasining uzunligi va diametrlari gidravlik hisob-kitoblar orqali sug'orish manbasining uzoqligi, sug'orish maydoni o'lchamlarini hisobga olgan holda amalga oshiriladi. Ekin maydoni hududini sug'orish davrida to'liq ta'minlashda sug'orish modulining quvur liniyasining uzunligi va diametri, shuningdek o'simliklari turiga, oqim tezligiga va sug'orish halqasidagi bosimga qarab tanlash zarur. Ekinlarni TOSning sug'orish moduli uchun ekspluatatsiya qo'llanmasi ekin turi ychun tayorlangan va texnologik kartaga kiritilgan.

Tuproq ostidan sug'orish texnologiyasini texnik ekinlar uchun tavsiya etiladigan o'lchamlari quyidagicha asosiy quvurga ulangan $\emptyset 0.032$ m ingichka quvurlar orasidagi masofa 0,9 m, ingichka quvurga ulanadigan shleflar orasidagi masofa 2 m, shlefning ingichka quvurga ulangan qismi 0.3 m, namlatgichlar oralig'idagi masofa 0.5 m ni tashkil etadi.

TOS texnologiyasi o'rnatilish sxemasi, sug'orish tizimida quvurlar, traynik, mufta, shleyf, barchasi politelin materialdan tayyorlangan. Politelin quvurlar xizmat ko'rsatish muddati 5-6 yilni tashkil etadi.

TOSE ni tuproq ichida o'rnatilishi hisobiga quyosh nuri tik tushmaydi shuni hisobiga uzoq vaqt xizmat qiladi. Buxoro-10 navli paxta ekilgan konturda yuqoridagi sxema asosida sug'orilganda. Ekinni suvga bo'lgan talabchanligi, iqlim haroratini hisobga olinadi. Shu yo'l bilan sug'orish rejimi amalga oshiriladi. Paxtalar tuproq ostidan sug'orishning rasmda ko'rsatilgan tartibda tavsiyasi ishlab chiqildi bunda 1 gektar uchun maydonning ikki tarafidan 50 m dan qilib 1-magistral quvur $\emptyset 32$ tashlanadi, 2-magistral suv taqsimlagich (perexod) $\emptyset 110$ ga o'tkazib beradi, 8-namlatgichlarning o'rni $\emptyset 32$ li quvur bo'ylab joylashtirildi.

Ekinzorlarda hosildorlikni ta'minlashning asosiy omillaridan biri o'simliklarning o'sishi va rivojlanishi uchun juda muhim bo'lgan tuproqning faol qatlamida maqbul namlikni hosil qilish jarayoni hisoblanadi [4,5,6,7]. Shuning uchun, tuproq namlik tanqisligi bilan hosilni hosil qilish uchun qulay shart-sharoitlar yaratish, birinchi navbatda, optimal sug'orish rejimini [10,11,12,13,14] aniqlashni talab etadi. Sug'orish rejimining asosiy ko'rsatkichi tuproqning faol qatlamini namlash va fil'tratsiyaga yo'qolishini oldini olish bilan sug'orish normasini belgilashdan iborat. Sug'orish me'yori hisoblashda tuproqning suv-fizik xususiyatlariga, faol qatlamning chuqurligiga va namlikning ruxsat etilgan pasayishi darajasiga muvofiq amalga oshiriladi.

$$m = 0,0314 \cdot a \cdot b \cdot l \cdot n \cdot d \cdot (\beta_{HB} - \beta_m)$$

$$m = 0,0065 \cdot H \cdot B \cdot l \cdot n \cdot d \cdot (\beta_{HB} - \beta_m)$$

bu yerda a, b -namlash konturining minimal va maksimal radiusi bo'lib

mos ravishda uning kengligi va chuqurligini ifodalaydi, m ; L - TISE ning uzunligi, m ; TOSE ning n - suv chiqarish teshikchalari soni, dona; H -namlangan tuproq qatlamining chuqurligi (yer yuzasidan hisoblaganda), m ; B -namlanish konturi tuprog'ining o'rtacha kengligi, m .

Xulosa qilib aytganda Buxoro viloyati sharoitida Buxoro-10 navli g'o'zani tuproq ostidan sug'orib parbarishlaganda ananaviy usulga nisbatan juda kata samaradorlikka erishiladi. Ananaviy usulda 40-45 sentner hosil olingan joydan, bu usul yani tuproq ostidan sug'orish (TOS) usuli qo'llanilganda 65-70 sentner hosil olindi.

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*Rajabov Ya.J.
"Qishloq xo'jaligi va chorvachilik texnika-texnologiyalari"
kafedrası v.b. dotsenti, t.f.f.d.,
Bobomurodov A.B.
"TIQXMMI" milliy tadqiqot universiteti
Buxoro tabiiy resurslarni boshqarish instituti tayanch doktoranti
Rajabova N.Ya.
"TIQXMMI" milliy tadqiqot universiteti
Buxoro tabiiy resurslarni boshqarish institute talabasi
G'afforova D.
QXM 2/1/ gruh talabasi*

**RESPUBLIKAMIZ PAXTACHILIK MINTAQALARIDA G'O'ZA
MAYDONINI ORGANIK O'G'ITLASHNING AHAMIYATI (BUXORO
VILOYAT MIQYOSIDA)**

Annotatsiya. Maqolada ekin yerlarning tuproq struktuyrasini yaxchilash, hosildorlikni oshirish orqali resurs tejamkorlikka erishish borasida olib borilayotgan ilmiy tadqiqot ishlari va qo'llaniladigan texnika va texnologiyalar, yangi qurilma, uni qo'llashda olinadigan ijobiy natijalar, shuningdek bu muammo echimini topish borasida ilmiy tadqiqot ishlari to'g'risida ma'lumotlar keltirilgan.

Kalit so'zlar: Tuproq strukturasi, qumli tuproq, sho'rlangan tuproq, organic o'g'it, chorvo chiqindisi, gumus, microelement, ildiz morfologiyasi, oziqlanish radiusi.

*Rajabov Ya.J., Ph.D.
v.b. associate professor
Department of "Agriculture and Animal
Husbandry Techniques and Technologies"
Bobomurodov A.B.
basic doctoral student
Bukhara Institute of Natural Resources Management
National Research University
Rajabova N.Ya.
student
Bukhara Institute of Natural Resources Management
National Research University "TIQXMMI"
Gaffarova D.
student of QXM 2/1/ group*

IMPORTANCE OF ORGANIC FERTILIZATION OF COTTON FIELDS IN THE COTTON-GROWING REGIONS OF OUR REPUBLIC (ON THE SCALE OF BUKHARA REGION)

Abstract. In the article, the scientific research works on improving the soil structure of cultivated lands, achieving resource saving by increasing productivity, and the techniques and technologies used, the new device, the positive results obtained from its use, as well as the scientific research works on finding a solution to this problem. information is provided.

Key words: Soil structure, sandy soil, saline soil, organic fertilizer, animal waste, humus, microelement, root morphology, nutrition radius.

Respublikamiz paxtachilik hududlaridagi sug'oriladigan erlar ham tabiiy-iqlim va tuproq sharoitlari, tuproqning mexanik tarkibi, unga ishlov berish texnologiyasi va qo'llaniladigan mashina turlari, ularga qo'yilgan agrotexnik talablarga ko'ra uch mintaqaga bo'lingan. Odatda chigit ekish va g'o'za parvarishi davrlarida bajariladigan ishlar hamma mintaqalarda deyarli bir xil bo'lib, faqat tuproqning meliorativ holatiga qarab, asosan yerni ekishga tayyorlash va g'o'zani sug'orishga tayyorlashda bajariladigan ishlarning turlicha bo'lishi hamda sug'orishlar soni va muddati bilan farqlanadi. Sho'r yerlarda o'g'itlardan foydalanishda avvalo, yerlarning meliorativ holati yaxshilanishi, ya'ni zovurlar toza va talabga javob beradigan darajada chuqur bo'lishi, yerlar past-baland bo'lmasligi, sho'r yuvish eng qulay agrotexnikaviy muddatlarda sifatli o'tkazilishi kerak. Tuproq unumdorligi kamayib ketgan, uning mexanikaviy tarkibi og'ir yoki suv o'tkazuvchanligi kuchli bo'lgan paykallarga ko'plab organik o'g'itlar solish ayniqsa yaxshi samara beradi.[1].

Magalliy o'g'itlar ichida go'ng asosiy o'rinni egallaydi. Ma'lumki, go'ng tarkibida g'o'za uchun eng zarur hisoblangan azot, fosfor va kaliy o'g'itlari, shuningdek, o'simliklar kam miqdorda talab qiladigan mikro-elementlardan: bor (B), marganets (Mg), Kobalt (So), Mis (Cu), Pyx (Zn), Molibdep (Mo) kabi moddalar ham bo'ladi. Bulardan tashqari go'ngda kalsiy, magniy, oltingugurt kislota va boshqa foydali moddalar ham bor.

Go'ng ekinlarga oziq bo'lishidan tashqari, undagi organik moddalar tuproq strukturasi yaxshilab, unumdorligini oshiradi. Go'ng solingan yerlarda uproqning g'ovakligi oshadi, suv o'tkazuvchanligi yaxshilanadi, namni *uzoq* saqlab turadi. Tarkibida organik moddalari kam, og'ir tuproqli yerlarda uning gajmini oshirishda, suv va havo rejimi hamda mikrobiologik protseslarni yaxshilashda go'ngning roli ayniqsa katta. Mexanikaviy tarkibi yengil tuproqlarda esa uning qovushqoqlik xusu-siyatini yaxshilaydi. Go'ng yerga solingai mineral o'g'itlarning samaradorligini oshirishda ham muxim omil hisoblanadi. Shuning uchun mineral o'g'itlarni organik o'g'itlar bilan aralashtirib solish tavsiya qilinadi. Ayniqsa, u tuproqda sekin eriydigan fosforli o'g'itlarning eruvchanligi kuchaytirib uni o'simlik oson o'zlashtiradigan holga keltiradi.

To'shama sifatida yaroqsiz bo'lib qolgan somon, maydalangan yosh qamish, sholi poxoli, torf, g'ozapo'choq kabilardan foydalanish mumkin.

Qoramol va otlari uchun bir sutkada 3-6 kg, qo'y, echkilar uchun 0,5-1,0 kg, cho'chqalar uchun (bolalari bilan) 6-8 kg to'shama kerak bo'ladi. F. A. Skryabin ma'lumotiga ko'ra, bir bosh etluk qoramoldan bir yilda 4,5 t, bir bosh buzoqdan 2,5 t, otdan 4,0 t, qo'ydan 0,4 t, cho'chqadan -0,6 t atrofida go'ng chiqishi umkin.

Molxona va otxonalarda to'plangan go'nglar maxsus chuqurlarga to'planib shu yerda chiritiladi yoki dala chetlari yoki o'rtalariga uyumlab usti tuproq bilan ko'miladi. Go'ngdagi azotning kamayib ketishini oldini olish va fosforli o'g'itni o'simlik yaxshi o'zlashtirishi uchun uni dalaga chiqarish oldidan har tonnasiga 20-40 kg superfosfat aralashtirish yaxshi samara beradi. G'oz parvarishida tuproq strukturasi mikroorganizmlarga boy bo'lishi ko'zlangan natijaga erishishga zamin boladi. Ayniqsa mahalliy o'g'itlar qatorida, ko'kat o'g'itlar, bakterial o'g'itlar va g'ozani o'g'itlash muddatlari va me'yorlari rejalashtirilgan hosilni olishda muhim o'rin tutadi.



a



b



c

a, b – o'g'itlash mashinasi, c - paxata dalasining ko'rinishi.

G'oz o'zining butun o'suv davrida barcha turdagi o'g'itlarga talabchan bo'ladi. Biroq, rivojlanish fazalari bo'yicha o'simlik o'g'it turini o'zlashtirishiga qarab turli miqdorda talab qiladi. G'oz yosh paytida, ya'ni shonaga kirgan davrigacha fosforli va azotli o'g'itlarga talabchan bo'ladi. Chunki bu davrda o'g'itlar etarli bo'lsa, o'simlikning ildiz sistemasi yaxshi taraqqiy etadi, g'oz baquvvat o'sib, dastlabki hosil shoxlar poyaniig pastki bo'gimlaridan chiqadi. Bu esa g'ozalarning erta shonalashiga olib keladi. Keyingi shonalashdan gullashgacha bo'lgan davrda g'ozalar fosforli o'g'itga nisbatan azotli o'g'itni ko'proq talab qiladi. Chunki bu davrda o'simlik mevalashga nisbatan poyaning bo'yiga o'sishiga va ko'plab shox-shabba.chiqarishga zo'r beradi. Olimlarimizning kuzatish lariga qaraganda, bu davrda g'ozalar azotni fosforgia nisbatan 10-13% ortiq o'zlashtirar ekan. Gullash-mevalash davrida g'ozalar azotga nisbatan fosforni 5-10% ko'proq talab qiladi. Sababi, bu davr o'simlik uchun hosil to'plash va ko'saklarni to'liq yetilish davri hisoblanadi. Shuningdek, g'ozalar pishib etilgan davrda hosilning erta yetilishi ko'saklarning bo'liq, chigiti to'q, tolasi pishiq va me'yorda yetilishi uchun ham fosforli o'g'itlarni ko'proq

talab qiladi. Kaliy o'g'itining yillik normasi odatda azotnikiga nisbatan 50% miqdorida berish maqsadga muvofiq hisoblanadi. Buning yarmini shudgorlash oldidan berish tavsiya qilinadi. Yer osti suvlari chuqur joylashgan tipik yoki och tusli kuzgi shudgorlash oldidan solish yaxshi samara beradi. Bunda azotli o'g'itlardan kalsiy sianamid, ammoniy sulfat va tarkibida azot hamda fosfor bo'lgan ammofos berish tavsiya ztiladi. Ammiakli selitra esa ekish vaqtida va g'ozaning o'suv davrida berilsa, uning samaradorligi kuzdagi berilganiga nisbatan yuqori bo'ladi. Ushbu tadqiqot ishida yuqorida aytib o'tilgan texnologik jarayonni amalga oshirishda agregatning bir o'tishida g'ozani ekishda organik o'g'itlaydigan energiya va resurstejamkor qurilmani yaratish va parametrlarini asoslash nazarda tutilgan.

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*Rajaboyev Sh.Sh.
SamISI "Axborot texnologiyalari" kafedrası assistenti
Ziyodullayev F.V.
Samarqand iqtisodiyot va servis instituti talabasi*

AXBOROT-KOMMUNIKATSIYA TEXNOLOGIYALARINI RIVOJLANTIRISH CHORA-TADBIRLARI TO'G'RISIDAGI QARORLAR MOHIYATI

Annotatsiya. Ushbu maqolada axborot-kommunikatsiya texnologiyalarini rivojlantirish chora-tadbirlari to'g'risidagi qarorlar mohiyati haqida so'z yuritilgan.

Kalit so'zlar: Axborot-kommunikatsiya texnologiyalari, Elektron hukumat, Axborot xavfsizligini ta'minlash, O'zbekiston Respublikasi Axborot texnologiyalari, Axborot texnologiyalari va kommunikatsiyalarini rivojlantirish.

*Rajaboyev Sh.Sh.
assistant
"Information Technologies" department
SamISI
Ziyodullayev F.V.
student
Samarkand Institute of Economics and Service*

NATURE OF DECISIONS ON MEASURES FOR THE DEVELOPMENT OF INFORMATION AND COMMUNICATION TECHNOLOGIES

Abstract. This article talks about the nature of decisions on the development of information and communication technologies.

Keywords: Information and communication technologies, Electronic government, Ensuring information security, Information technologies of the Republic of Uzbekistan, Development of information technologies and communications.

O'zbekiston Respublikasi Prezidentining "Yangi O'zbekiston ma'muriy islohotlarini amalga oshirish chora-tadbirlari to'g'risida" gi 2022-yil 24-dekabrda PF-269-son Farmoni bilan Vazirlar Mahkamasi tizimida Raqamli texnologiyalar vazirligi tashkil etilgan. Vazirlik faoliyatining asosiy vazifalari va yo'nalishlari quyidagilardan iborat: axborot texnologiyalari va kommunikatsiyalar sohasida, "elektron hukumat"ni joriy etishda yagona davlat siyosati amalga oshirilishini ta'minlash, axborot texnologiyalarini rivojlantirishning jahon darajasidan kelib chiqqan holda milliy axborot-kommunikatsiya tizimini tatbiq etish va rivojlantirish yuzasidan kompleks

dasturlarni ishlab chiqish va amalga oshirish; telekommunikatsiya infratuzilmasini yanada rivojlantirish va modernizatsiya qilish, shu jumladan, Internet tarmog'iga keng polosali ulanishni kengaytirish, telefon aloqasi, televideniye va radioeshittirishning raqamli tizimlariga to'liq o'tishni ta'minlash, aloqa va telekommunikatsiyalar sohasidagi faoliyatni, shuningdek, radiochastotali spektrdan foydalanishni davlat yo'li bilan boshqarish, litsenziyalash va nazorat qilish borasidagi funksiyalarni amalga oshirish;

“Elektron hukumat”ni tatbiq etish, vazirliklar, idoralar, kompaniyalar va uyushmalarning, mahalliy davlat hokimiyati organlarining axborotlashtirish va interaktiv davlat xizmatlarini takomillashtirish borasidagi faoliyatini idoralararo muvofiqlashtirish, monitoring qilish, baholash va nazorat qilish bo'yicha davlat dasturlarining amalga oshirilishini ta'minlash, shuningdek, davlat axborot resurslari hamda ma'lumot bazalarini shakllantirish, saqlash va foydalanishning yagona tizimini vujudga keltirish, idoralararo axborot tizimlarini yaratish va boshqarish;

Internet tarmog'ining milliy segmenti yanada shakllantirilishini ta'minlash, mamlakatimizning turli yo'nalishlardagi zamonaviy veb-resurslarini, shu jumladan, aholining, xususan, yosh avlodning axborotga bo'lgan va intellektual talab-ehtiyojlarini qondirish maqsadida tarmoq resurslarini rivojlantirish uchun zarur texnik va qulay shart-sharoitlarni yaratish; raqobatdosh dasturiy mahsulotlarning mamlakatimizda ishlab chiqarilishini va ichki bozorini hamda ularga ko'rsatiladigan xizmatlarni rivojlantirishga ko'maklashish va uning muvofiqlashtirilishini ta'minlash, iqtisodiyotning real sektori tarmoqlarida va iste'molchilarda zamonaviy dasturiy mahsulotlar, axborot tizimlari va axborot resurslarini joriy etish;

Axborot xavfsizligini ta'minlash va kommunikatsiya tarmoqlari, dasturiy mahsulotlar, axborot tizimlari va resurslarini himoya qilishning zamonaviy texnologiyalarini tatbiq etish chora-tadbirlarini amalga oshirish, axborot resurslarini himoya qilish bo'yicha texnik infratuzilmani yanada rivojlantirish; zamonaviy kommunikatsiya vositalari sohasida ilmiy tadqiqotlar va ishlanmalarni, kadrlarni tayyorlash, qayta tayyorlash va malakasini oshirishni tashkil qilish, dasturiy mahsulotlar, axborot tizimlari va ma'lumotlar bazalarini ishlab chiqish va tatbiq etish, axborot xavfsizligini ta'minlash va axborot-kommunikatsiya texnologiyalarining boshqa sohalarida shunday ishlarni tashkil etish; aloqa, axborot texnologiyalari va kommunikatsiyalar sohasida xalqaro hamkorlikni yo'lga qo'yish, ustuvor loyihalarni amalga oshirish, radiochastotalik spektrdan samarali foydalanish uchun hamda vazirlik faoliyati doirasiga kiruvchi boshqa yo'nalishlar bo'yicha xorijiy investitsiyalarni jalb etish.

O'zbekiston Respublikasi Prezidentining «O'zbekiston Respublikasi Aloqa, axborotlashtirish va telekommunikatsiyalar texnologiyalari davlat qo'mitasi faoliyatini tashkil etish to'g'risida» 2012-yil 23 oktabrdagi PQ-1836-son qaroriga muvofiq, shuningdek iqtisodiyot tarmoqlarida axborot-kommunikatsiya texnologiyalarini joriy etish va ulardan foydalanish

jarayonlarida Axborot-kommunikatsiya texnologiyalarini rivojlantirish jamg'armasining rolini oshirish va ishtiroki ko'lamlarini kengaytirish maqsadida Vazirlar Mahkamasining 2012-yil 19-dekabrda «Axborot-kommunikatsiya texnologiyalarini rivojlantirish jamg'armasini yanada rivojlantirish va uning mablag'laridan samarali foydalanish to'g'risida»gi qarori imzolangan.

Mazkur qaror bilan Axborot-kommunikatsiya texnologiyalarini rivojlantirish jamg'armasi to'g'risidagi nizom 1-ilovaga muvofiq;

Axborot-kommunikatsiya texnologiyalarini rivojlantirish jamg'armasi boshqaruvi apparati tuzilmasi 2-ilovaga muvofiq;

Axborot-kommunikatsiya texnologiyalarini rivojlantirish jamg'armasi Kengashi tarkibi 3-ilovaga muvofiq tasdiqlangan. Quyidagilar Jamg'armaning vazifalari va faoliyatining asosiy yo'nalishlari hisoblanadi:

a) ushbu Nizomning 4-bandida ko'rsatilgan manbalardan tushgan mablag'larni jamlash;

b) Jamg'arma hisob raqamlarida jamlangan mablag'lardan:

- davlat boshqaruvi organlari va mahalliy davlat hokimiyati organlarining idoralararo integratsiyalashtirilgan axborot tizimlarini joriy etishni, ma'lumotlar uzatishning idoralararo tarmoqlarini tashkil etishni, «Elektron Hukumat» tizimlarini va davlat buyurtmasi doirasida amalga oshiriladigan qidirish tizimlarining milliy segmentini shakllantirish bo'yicha loyihalarni ishlab chiqish, amalga oshirish va kuzatib borishni;

- xalqaro standartlarga muvofiq va mamlakatni ijtimoiy-iqtisodiy rivojlantirishning uzoq muddatli istiqbollarini hisobga olgan holda aloqa, televideniye va radioeshittirish sohasida telekommunikatsiya tarmoqlari va tizimlarini rivojlantirish va modernizatsiya qilishni;

Internet tarmog'ining milliy segmentini shakllantirishni, turli yo'nalishdagi zamonaviy mahalliy axborot resurslarini, shu jumladan aholining, ayniqsa yosh avlodning axborotga bo'lgan va intellektual ehtiyojlarini qondirish uchun tarmoq resurslarini shakllantirishni;

✚ davlat axborot resurslari va ma'lumotlar bazasini shakllantirish, saqlash va ulardan foydalanishning yagona tizimini ishlab chiqish, amalga oshirish va kuzatib borishni;

✚ ma'lumotlar uzatish tarmoqlarini va axborot-kommunikatsiya texnologiyalarini rivojlantirish sohasida ustuvor loyihalarni amalga oshirishni, normativ-huquqiy hujjatlar, ilmiy-tadqiqot ishlari va dasturlarni ishlab chiqish, shuningdek ushbu sohada loyihalarni tayyorlash uchun tadqiqotlar o'tkazishni;

✚ aloqa, axborot-kommunikatsiya texnologiyalari, respublikaning butun hududida ma'lumotlarni uzatish milliy va xalqaro axborot tarmoqlaridan yuqori tezlikda foydalanish sohasida xizmatlarning yangi turlarini ishlab chiqish va joriy etishni;

✚ aloqa, kompyuter va tarmoqli texnologiyalar, dasturlashtirish va elektron ma'lumotlar bazasini yaratish sohasida mutaxassislar tayyorlash va

ularni qayta tayyorlash tizimini rivojlantirishni, shuningdek kompyuter va axborot texnologiyalaridan keng foydalanishga asoslangan o'qitish tizimini;

O'zbekiston Respublikasi Axborot texnologiyalari va kommunikatsiyalarini rivojlantirish vazirligi hamda Aloqa, axborotlashtirish va telekommunikatsiya texnologiyalari sohasida nazorat bo'yicha davlat inspeksiyasi apparati faoliyatini xodimlarni qo'shimcha ravishda moddiy rag'batlantirish va moddiy-texnika bazani mustahkamlash yuzasidan; (O'zR VM 27.06.2015-y. 171-son Qarori tahriridagi xatboshi)

Axborot texnologiyalari va kommunikatsiyalarini rivojlantirish vazirligi tizimiga kiruvchi telekommunikatsiya va axborot tizimlari ustidan boshqarish va nazorat qilish organlarini, shuningdek aloqa obyektlari davlat kadastri xizmatlari, elektron raqamli imzolar kalitlarini ro'yxatdan o'tkazish markazlari faoliyatini, terminologiya va lug'atlarni, standartlashtirish bo'yicha bazaviy tashkilotlarni va bazaviy metrologik xizmatni, shuningdek axborotlashtirishni joriy etish va rivojlantirish bo'yicha mustaqil daromad manbaiga ega bo'lmagan xizmatlarni rivojlantirishga ko'maklashishni; (O'zR VM 27.06.2015-y. 171-son Qarori tahriridagi xatboshi)

Respublika axborot-kutubxona markazining faoliyatini;

✚ axborot va pochta xavfsizligi, telekommunikatsiya tarmoqlari tizimini, axborot tizimlari va resurslarini himoya qilish texnologiyalarini joriy etishni, zamonaviy talablar va standartlarga muvofiq axborot va pochta xavfsizligini ta'minlash bo'yicha texnik infratuzilmani rivojlantirishni;

✚ tanlov asosida tanlab olinadigan aloqa, axborotlashtirish va telekommunikatsiya texnologiyalari sohasini rekonstruksiya qilish, ularni rivojlantirish va kompyuterlashtirish bo'yicha loyihalarni amalga oshirishni;

✚ efirga ruxsat berilmagan chiqishlarning va davlat tuzilmalari radio vositalariga to'sqinlik qilishning oldini olish maqsadida radio chastota spektridan foydalanish ustidan davlat nazorati uchun maxsus nazorat-o'lchov texnikasi sotib olish xarajatlarini qisman qoplashni;

✚ axborot-kommunikatsiya texnologiyalarining sifatli vositalarini va mahalliy dasturiy mahsulotlarni, shu jumladan, ijtimoiy-ko'ngilochar va ta'lim yo'nalishidagi dasturiy mahsulotlarni ishlab chiqarish infratuzilmasini rivojlantirishni;

✚ qishloq joylarda xizmatlar ko'rsatuvchi aloqa, radioeshittirish va televideniye tashkilotlariga vaqtincha moliyaviy yordam berishni;

✚ O'zbekiston Respublikasining qishloqlari va chekka aholi punktlarining telekommunikatsiya infratuzilmasini maqsadli qayta jihozlash va yanada rivojlantirishni;

✚ operatorlar va provayderlar tomonidan ko'rsatiladigan universal aloqa xizmatlarini rivojlantirishni;

✚ dasturlashtirish, tizimli ma'muriyatchilik, kompyuter dizayni, animatsiyalar va axborot texnologiyalarining boshqa yo'nalishlari bo'yicha tanlovlar, musobaqalar va bellashuvlar o'tkazish yo'li bilan axborot-

kommunikatsiya texnologiyalari sohasida mutaxassislar faoliyatini rag'batlantirishni;

Litsenziyalar berilganligi, abonent raqamidan foydalanganlik uchun mobil aloqa operatorlari tomonidan to'lanadigan to'lov, aloqa sohasida faoliyatni amalga oshiruvchi yuridik shaxslardan olingan jarima sanksiyalarining undirishdan tushgan mablag'lar summasining 5 foizi miqdorida davlat boji O'zbekiston Milliy kutubxonasi huzuridagi byudjetdan tashqari Axborot-kutubxona muassasalarini rivojlantirish jamg'armasiga ajratilishi bo'yicha xarajatlarni moliyalashtirishda foydalanish.

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DEPENDENCE OF MATURING PERIOD ON SPEED OF COTTON VARIETIES

Annotation. The paper presents materials related to investigation of maturation intensity of F_1 - F_3 hybrids which created by crossing ultra-early maturing lines with upland varieties in the period of growth stages.

It is known that early ripening of cotton is one of the important problems, and it is one of the main factors determining the yield. Usually, quick ripening is the period from planting cotton to ripening of bolls.

N.G.Simongulya said that signs of early ripening are biologically different signs of plants, due to their non-uniform genetic nature, so it is appropriate to see them separately. In recent years, a number of researchers (V.P.Senoedov; G.R.Kholmurodova, etc.; A.E.Egamberdiev, etc.) in the F_1 - F_2 hybrid generations have shown the development phases, inheritance patterns, dominance (extreme and complete) valuable information about the differences between the characteristics, the duration and duration of the flowering and ripening phases was obtained.

In our research, very fast (100 days), fast (110-115 days) and medium (120-125 days) cotton varieties were used as starting sources. According to the data obtained on the periods of F_1 - F_3 hybrids until 50% flowering (table-1), the period of 50% ripening of hybrids in the first year biological nursery was 52-56 days. and the 50% flowering period in the hybrid generations was 5, 6, and 7 days faster in the medium-growing Bukhoro-102, Bukhoro-8 and Bukhoro-6 varieties, and in the hybrid generations in which the fast-growing UzPITI-103 and UzPITI-102 varieties participated. it was observed that it started 1 and 3 days earlier, respectively. This indicates the beginning of alternation of these signs in the forms of motherhood. Also, the comparative analysis of ultra-quick varieties taken as fathers shows that the medium-quick Bukhoro-102, Bukhoro-8 and Bukhoro-6 varieties were used for 4-6 days in F_1 hybrids, and 2-4 days when the quick-quick varieties UzPITI-102 and UzPITI-103 were used. more closely, the stabilization of the transmission of these signs of rapidity from generation to generation is continuing from a genetic point of view. Compared to the control S-6524 variety (59 days), F_1 hybrids were 3 days earlier in the Bukhara-6x010888 hybrid, 4 days in the Bukhara-8x010941 hybrid, 5 days earlier in the Bukhara-102x010941 hybrid, especially 4 days in the UzPITI-103x010738 hybrid. In the UzPITI-102x010797 hybrid generation, it was observed that it accelerated to 5 days and in the UzPITI-102x010941 hybrid generation to 7 days.

It is known that early ripening of cotton is one of the important problems, and it is one of the main factors determining the yield. Usually, quick ripening is the period from planting cotton to ripening of bolls.

The above-mentioned characteristics of 50% flowering period were genetically transferred to F_2 - F_3 hybrid generations from generation to generation, and were preserved in the second and third year biological nurseries. In particular, with the 50% flowering period of hybrid offspring in the third year biological nursery (F_3) being 53-56 days, these traits are genetically stabilized compared to the paternal and maternal forms, as a result, in these hybrid offspring, compared to the control S-6524 variety, Bukhara-6x010888 hybrid offspring 3 per day, 4 days in the Bukhara-6x010941 hybrid, 5 days in the Bukhara-102x010941 and UzPITI-103x010738 hybrids, and up to 6 days in the UzPITI-102x010941, UzPITI-102x010953 and UzPITI-102x010797 hybrids it was observed that it was in longer periods.

According to the data obtained on the study of the maturation period of 50% of the F_1 - F_3 hybrid offspring, it was calculated that it was 109-114 days in the first-year biological seedlings (F_1). When the 50% ripening periods of these F_1 hybrids were compared to the varieties obtained as maternal forms, it was 11 days earlier when the medium Bukhara-102, Bukhara-8 and Bukhara-6 varieties participated, and the early UzPITI-103 and UzPITI-102 varieties participated. and in the hybrid generations, it was observed that it accelerated up to 8 and 12 days, respectively. This is the fact that the signs of pregnancy are embodied in the forms taken as motherhood. According to the comparative analysis of the super-quick varieties obtained as paternal forms, in hybrids with the participation of the medium-quick Bukhoro-102, Bukhoro-8 and Bukhoro-6 varieties, respectively, 11, 12 and 14 days, and with the participation of the quick-quick UzPITI-102 and UzPITI-103 varieties. closer to 9-12 days, respectively, it was observed that the stabilization of these characters continues genetically.

As a result of the research, it was observed that in the second and third year (F_2 - F_3) biological nurseries, the laws of genetic inheritance of signs of quick ripening were preserved. In particular, with the 50% ripening period of the hybrid offspring in the third-year biological nursery (F_3) being 110-113 days, the genetic stabilization of these traits compared to the paternal and maternal forms, as a result, in these hybrid offspring, compared to the control variety S-6524, Bukhara-6x010888 and Bukhara -8x010941 hybrids for 8 days, for 10 days for Bukhara-102x010941 and UzPITI-103x010738 hybrids, and for 11 days for UzPITI-102x010941, UzPITI-102x010953 and UzPITI-102x010797 hybrids it was observed that the pace accelerated.

From the above data, it can be concluded that in the F_1 - F_3 hybrid generations obtained from medium-ripening forms as mother (Bukhoro-6, Bukhoro-8, Bukhoro-102 varieties) and extremely fast-ripening samples (010941 and 010888) as father The 50% ripening interval was on average 62 days in the control S-6524 cotton variety, 57-58 days in the Bukhara-6x010888 hybrid, and

57 days in the Bukhara-8x010941 and Bukhara-102x010941 hybrids. Compared to the S-6524 variety, it was observed that it accelerated up to 4-5 days. Also, the time interval from 50% flowering to 50% ripening in the F₁-F₃ hybrids obtained from quick-ripening forms as maternal (UzPITI-102 and UzPITI-103 varieties) and ultra-quick samples (010941, 010953, 010797, 010738) in the control variety S-6524 with an average of 62 days, UzPITI-102x010941, UzPITI-102x010953, UzPITI-102x010797 and UzPITI-103x010738 hybrids had an average of 57 days, that is, the rate of ripening of these hybrids compared to the sample S-6524 succeeded in speeding up to 5 days. This makes it possible to further accelerate the future selection processes, as a result, to select new selection materials with a high 1st harvest weight and to evaluate them comprehensively according to their general economic value characteristics.

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Rakhimova M.R.
senior lecturer
Andijan Institute of Agriculture and Agrotechnologies

MEASURES OF FIGHTING AGAINST FRUIT TREES

Abstract. It is known to everyone that the number of orchards in Uzbekistan is increasing year by year. Fruit products grown in our country are loved and consumed not only in our country, but all over the world. The reason for this is the timely arrival of crops in our country, moderate weather and high-quality cultivation technologies. At the same time that orchards are increasing, their harmful organisms are also increasing. One of them is the Californian shields, which currently causes some difficulties to fight against such pests. The formation of protective shields and rapid adaptation to the season of California shields have become the main problems of farmers. If effective methods against such pests are not destroyed, long-term fruit trees can dry out quickly. Our research has shown that the best results can be achieved against Californian beetles if applied in early spring when the beetles are weak.

Key words: Fruit trees, apple, pear, plum, cherry, peach, cherry, apricot, control measures and chemical drugs.

More than 160,000 farms operate in the republic. Multi-branch farms have increased by 45% and their number has reached 75 thousand. This year, 8.377 million tons of grain, more than 2.93 million tons of cotton, 12.45 thousand tons of cocoons, 318 thousand tons of rice, 23 million tons of fruits and vegetables, 13 million tons of meat and dairy products were grown in our country. For the first time, planting of saffron was started, soybean planting expanded. 132 thousand tons of agricultural products were processed and finished products worth 100 million dollars were exported. 724,000 tons of wet fruits worth 856 million dollars were sold abroad. First of all, efficient use of land and prevention of its looting is one of the most important tasks, the head of state said. There is only 3,300,000 hectares of irrigated land in the country, and there is no way to increase it. Because water resources are limited in Uzbekistan. There are difficulties in irrigating 830,000 hectares of land.

In terms of damage, the California shield is second only to the apple borer. (5) California shields from fruit trees, mainly apples, pears, plums, cherries, peaches, cherries, apricots, and black currants, from forest and ornamental forest trees, hawthorns, roses, willows, flowers, red causes serious damage to fruit bush plants. Apple is one of our favorite fruits. I can't be surprised, because it is not only a sweet fruit with an amazing taste, but also a blessing with healing properties. Abu Ali ibn Sina, the great exponent of Eastern medicine, also recommended eating one apple before going to bed every day. Apple is a place of various vitamins, trace elements and other useful substances. (7)

It is known that no matter how much the farmers fight against this pest, the damage of this pest does not decrease. Therefore, the speed, direction and location of the terrain are of great importance. In the valleys, the shield spreads faster than in the mountainous regions. They spread quickly mainly in densely planted (intensive type) gardens. California shields damage a variety of plants. From fruit plants, it damages apples, pears, plums, and reds more, and from grass plants, it is more common in beans, carrots, turnips, and pumpkins..

If a plant is infected with a scab for a long time, not only the bark, but also the internal tissues are damaged, which has a negative effect on the healthy growth of the plant. As a result, cracks appear, the bark becomes reticulated and resembles the bark of old trees. As a result of a long-term damage to a plant by a colony of beetles, some parts of the bark, branches and the whole tree trunk dry up. Red spots on fruits can also be caused by leafhoppers similar to the California leafhopper. Such spots are usually scattered on the fruits.

California shields - *Diaspidiotus perniciosus* Somst (Homoptera - family of isteroptera, Diaspididae - family of shields). It is considered a plant quarantine object. It is distributed in Georgia, Krasnodar and Sevastopol regions, Rastovsk region, southern Ukraine, Moldavia, several regions of Central Asia, Primorye and Khabarovsk regions, and the southern part of Sakhalin. (Osmolevsky 1980). Leaf beetles damage many types of plants, that is, more than 200 trees and shrubs are affected, their growth slows down, the yield and quality decrease, red spots or packages appear on the affected fruits, they do not develop fully, it takes a cold shape and cracks appear, some branches dry out, of course, not to mention the harvest.

In practice, the study of the coccid fauna of Uzbekistan and all of Central Asia began in 1908, when academician N. Nosonov (1908) was the first to find the eastern pillow (*Pulvinaria orientalis* Nas). From Muyunkum, the American coccidologist S. Marlatt (Marlatt 1908) described the Caspian shield from Ashgabat (*Aspidiotus transcaspianus* Marlatt. In 1911, the establishment of the Turkestan Entomological Station in Tashkent was an important event in the study of coccids (now the Plant Protection of the Republic of Uzbekistan The staff of this station paid attention to coccids, and these pests (coccids) became the object of research (Plotnikov, 1915). Observations were made on succulent shields found on fruit trees in orchards around Tashkent. Young apple and on pear trees, a large shield (*Lecanium bituberculatum* Tang) was observed. Now it is called a false shield of hawthorn (*Palaeolecanium bituberculatum* Targ). Later, in 1913-1914, the author noted an increase in the number of comma-shaped shields of apples (*Lepidosaphes ulmi* L and *Lecanium* sp.). The scientist notes that it resembles a comma-shaped shield (*Lecanium bituberculatum* Tang) (Plotnikov, 1915). At the same time, Turkestan agriculture reported on damage to fruit trees in the Isfara valley (I. Sevastyanov, 1914, present-day Khojand region). Along with the mulberry tree, hawthorn and spherical shields and others are widespread.

Purple shield (*Parlatoria oleae* Solveye). The body shape of the female is wide oval (egg-shaped), almost five-sided, evenly segmented, purple, the front part is wide circular. The joints of the body are well formed, the pygidium is broadly formed, the neck of the khartoum is long, the mustache is articulated, the part of the pygidium is 3 pairs with one hair, the length of the undivided body is 1-1.3 mm, the shield of the female is white or white gray, short ovoid with a convex oval, sometimes rounded, 2-2.5 mm long and 1-1.5 mm wide, the skin of the larva is located eccentrically at the edge of a large, dark green, brown or almost black shield. The male is reddish-purple, the front wings are well developed, the length of the body is up to 1 mm, the nymph shield of the female is flat, elongated, white, 1.5 mm long. dark green larval skin looks good. Purple leaf beetle is a serious pest of many fruit and ornamental trees. Widespread in Mediterranean countries, Middle East and Middle East: Pakistan, India, Brazil, Argentina, Australia and America. Widespread in Uzbekistan, Tashkent, Syrdarya, Samarkand. It was found in Andijan, Jizzakh, Kashkadarya, Surkhandarya and Fargona regions. Larvae and females settle on the leaves, branches and twigs of cherry, mountain cherry, peach, plum, apricot, cherry and other fruit trees and suck cell juice. This leads to a weakening of the tree, a decrease in yield and a decrease in the quality of its fruit. Reddish spots (spots) appear in the affected areas, especially on the fruits, which reduces the quality and taste of the fruits. A heavily infected tree dries up.

Chemical control measures against the California shield (*Diaspediotus persinosus*).

Chemical control measures should be carried out in the case of the damage caused by the economically dangerous number of pests. When carrying out chemical control measures against insects, the pest's way of life, its structure, biology, ecology, vitality, adaptation to the external environment, giving many generations in one season are factors that affect the effectiveness of chemical control. Sometimes drugs that enter the stomach through the intestine and affect pests do not affect the pests that are absorbed and feed, on the contrary, systemic drugs also affect the pests that are absorbed and fed. At the same time, the thyroid gland is affected by these drugs, i.e. contact. The drugs given in the list of approved chemical pest control are effective if they are used in moderation.

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*Rasulov L.F.
Toshkent davlat iqtisodiyot universiteti magistranti*

O‘ZBEKISTON RESPUBLIKASIDAGI XUSUSIY SEKTOR KORXONALARIDA SOLIQ HISOBINI AVTOMATLSHTIRISH YO‘LLARI

Annotatsiya. Mazkur maqolada soliq tizimida raqamli texnologiyalardan samarali foydalanish orqali soliq bilan bog‘liq barcha xizmatlarni osonlashtirish, ya‘ni soliq organlari xodimlari va soliq to‘lovchilarning imkoniyatlari kengaytirish, soliq tizimidagi ko‘plab ishlarni raqamli texnologiyalari orqali bajarish bo‘yicha taklif va amaliy tavsiyalar shakllantirilgan.

Kalit so‘zlar: soliq tizimi, raqamli texnologiyalari, soliq hisoboti, soliq tushumlari, soliq, samaradorlik, raqamli platforma, raqamli transformatsiya.

*Rasulov L.F.
graduate student
Tashkent State University of Economics*

WAYS TO AUTOMATE TAX CALCULATION IN PRIVATE SECTOR ENTERPRISES IN THE REPUBLIC OF UZBEKISTAN

Abstract. In this article, through the effective use of digital technologies in the tax system, all tax-related services are facilitated, i.e., the opportunities of tax authorities and taxpayers are expanded, and many tasks in the tax system are performed through digital technologies. recommendations are formulated.

Key words: tax system, digital technologies, tax reporting, tax revenue, tax, efficiency, digital platform, digital transformation.

So‘nggi vaqtlarda “Raqamli iqtisodiyot” tushunchasi juda ko‘p marta qo‘llanilmoqda. Darhaqiqat, ko‘plabrivojlangan mamlakatlarda raqamli iqtisodiyot ularning rivojlanish omillariga sezilarli darajada ta‘sir o‘tkazgan. Raqamli iqtisodiyot – bu xo‘jalik faoliyatini yuritish bo‘lib, bunda ishlab chiqarish va xizmat ko‘rsatishdagi asosiy omil raqamlar ko‘rinshidagi ma‘lumotlar bo‘lib, katta hajmdagi axborotlarni qayta ishlash va shu qayta ishlash natijasini analiz qilish yordamida har xil turdagi ishlab chiqarish, xizmat ko‘rsatish, texnologiyalar, qurilmalar, saqlash, mahsulotlarni yetkazib berishda oldingi tizimdan samaraliroq yechimlar tatbiq qilishdir. Boshqacha qilib aytganda, raqamli iqtisodiyot bu onlayn xizmatlar ko‘rsatish, elektron to‘lovlar amalga oshirish, internet savdo, va boshqa turdagi sohalarni raqamli kompyuter texnologiyalarini rivojlanishi bilan bog‘langan faoliyatdir. Soliq tizimida raqamli texnologiyalardan unumli foydalanish birinchi navbatda davlat soliq xizmati organlari xodimlari tashkil qilinib, amalda qo‘llaniladi. Davlat soliq siyosatini

amalga oshirishda asosiy mavqeni egallagan soliq organlariga soliq qonunlariga rioya qilinishi ustidan nazoratni amalga oshirishdek yuksak vazifa yuklatildi. O'tgan davr oralig'ida soliq organlari davlat budjetining daromad qismini uzluksiz to'ldirishni ta'minlaydigan muntazam tizimga aylandi.

Soliq tizimida raqamli texnologiyalarining vazifasi soliq xizmati organlari oldiga qo'yilgan masalalarni hal etish uchun to'langan soliqlar va yig'imlar tushumi haqida ma'lumotlar statistikasini ishlab chiqilgan maxsus algoritmlar asosida olib borish va tegishli organlarga uzatish, tushumlar dinamikasini tahlil qilish, boshqaruv qarorlarini qabul qilish uchun tahliliy ma'lumotlarni berish, tahliliy ma'lumotlar asosida hisobotlar tayyorlash masalalarini yechishni ta'minlashdan iborat [1]. Soliq xizmati organlarida axborot tizimlari va texnologiyalarini joriy etishning maqsad va vazifalari soliq xizmati organlari bajaradigan funksiyalar, vazifalar, bir xildagi operatsiyalarni yangi dasturlar bilan imkoni boricha kengroq qamrab olishni ta'minlashdir, zero bu dasturlar soliq ma'lumotlariga ishlov berish jarayonini jadallashtirish, soliq inspektorlari ishining samaradorligini oshirish, ularning ishidagi bir tUSDagi hisob-kitob va oxiri yo'q yozuvlar bilan ishlash yukini kompyuter statistikasining zamonaviy vositalaridan foydalangan holda ijodiy tahlil qilish sohasiga chiqish imkonini beradi. O'zbekiston Respublikasi Prezidenti Shavkat Mirziyoyev 2019-yilning 10-iyul kuni "Soliq ma'muriyatchiligini takomillashtirish bo'yicha qo'shimcha chora tadbirlar to'g'risida"gi qarorni qabul qildi. Farmonida ham soliq tizimida Soliq tizimini yanada takomillashtirish, iqtisodiyotda xufiyona aylanmani qisqartirish va O'zbekiston Respublikasi soliq siyosatini takomillashtirish konsepsiyasining asosiy yo'nalishlarini amalga oshirish maqsadida [2]: Davlat organlari va tashkilotlari o'rtasida axborot almashish mexanizmlarining, elektron soliq ma'muriyatchiligi hamda soliq nazoratini amalga oshirish shakl va uslublarining takomillashmaganligi e'tiborga olinadi.

Davlat soliq qo'mitasi (DSQ) va uning bo'g'inlari bilan ularga aloqador tashkilot va muassasalar uchun talab etilgan tartibda axborot va ma'lumotlar tayyorlashdan iborat. Davlat soliq xizmati organlari axborot texnologiyalarining oldiga qo'yilgan vazifalarni bajarish uchun quyidagi masalalar hal etilgan [3]:

- Barcha hujjatlar mazmuni va shakli standartlashtirilgan va unifikatsiyalashtirilgan;

- Axborotlar klassifikatsiyalashtirilgan va kodlashtirilgan;

- Bo'g'inlar va tizimning bosqichlari o'rtasida axborotni uzatish tizimi joriy etilgan;

- Avtomatlashtirilgan tizim, hamda u bilan bog'liq bo'lgan axborotlashgan tizim o'rtasida axborotlar almashish yo'lga qo'yilgan;

- Dasturiy-texnik majmua va tizimli dasturiy ta'minot unifikatsiyalashtirilgan. Soliq xizmati organlarida joriy etilgan axborot tizimlari va texnologiyalarining tuzilishi va tarkibi hamda ungayuklatilgan vazifalar soliq tizimida boshqaruvni avtomatlashtirish imkoniyatini beradi. Shu bilan birga u takomillashib, yangilanib borish xususiyatiga ega. Soliq xizmati organlarida soliq

obyektlari va ularning tushumlari hamda soliq ishini tashkil etishning avtomatlashtirilgan (axborot texnologiyalarini qo'llash) shakllarini yaratish va realizatsiya qilishdan unumli foydalaniladi. Soliq xizmati organlarida ish jarayonlarini, shuningdek, soliq obyektlari, tushumlari va soliq to'lovchilarning holati va harakati to'g'risidagi ma'lumotlarning yagona axborot bazasini yaratish va unga zamonaviy axborot texnologiyalarni qo'llash ishlari tashkil etiladi. O'zbekiston soliq tizimida bu borada 30 dan ortiq maxsus dasturiy mahsullardan foydalaniladi [1]. Davlat soliq xizmati organlari faoliyatini kompyuterlashtirish va axborotlashtirish, malakali xodimlarni tayyorlash, kompyuter jihozlari, dasturiy mahsullar bilan ta'minlash hamda zamon talabidan kelib chiqib, soliqdoralarda jamlangan hisobotlarni elektron ko'rinishda quyi soliq xizmati organlaridan Davlat soliq qo'mitasig'uzatish, Davlat soliq qo'mitasi tomonidan beriladigan operativ topshiriqlarni davlat soliq boshqarmalariga va davlat soliq inspeksiyalariga to'g'ridan – to'g'ri uzatish masalalari, shu bilan birga soliq to'lovchi yuridik va jis-moniy shaxslarni ro'yxatga olish, ularni davlat budjeti oldidagi majburiyatlarining bajarilishi haqidagi ma'lumotlarni yagona soliq to'lovchilar bazasida saqlash va boshqa masalalar dolzarb masalaga aylandi [3]. Soliq tizimida zamonaviy axborot-kommunikatsiya texnologiyalarini qo'llashda bir qancha muammolar yuzaga keladi. O'sha muammolardan birini axborot xavsizligini ta'minlash hisoblanadi. Davlatning axborot xavsizligini ta'minlash muammosi milliy xavsizlikni ta'minlashning asosiy va ajralmas qismi bo'lib, axborot himoyasi esa davlatning birlamchi masalalariga aylanmoqda. Axborotni himoyalashning turli usullari mavjud bo'lib, elektron hujjat aylanishi tizimiga o'tilayotgan bugungi kunda elektron raqamli imzo asosida hujjatlar aslligini tasdiqlash va ularni himoya qilish iqtisodiy axborot almashinuvida eng qulay usullardan biri hisoblanadi. Soliq tizimida raqamli texnologiyalaridan foydalanishning asosiy maqsadlari quyidagilardan iborat:

- Soliq tushumlari bo'yicha ma'lumotlarni olish.
- Ish samaradorligini oshirish.
- Qog'ozdagi ish oqimining hajmini kamaytirish.
- Soliq tekshiruvlarini ma'lumotlar bilan ta'minlash.
- Soliq to'lovchilar to'g'risidagi ma'lumotlarning ishonchliligini oshirish.
- Soliq qonunchiligiga rioya etilishini nazorat qilish.

Boshqa har qanday avtomatlashtirilgan tizimlarda bo'lgani kabi, Soliq tizimida axborot texnologiyalaridan foydalanishga ham bir qator talablar qo'yiladi, birinchi navbatda, tegishli funksiyalarni samarali bajarish bilan bog'liq. Ishlab chiqilgan soliq axborot tizimi nafaqat soliq organlari ishlarini osonlashtirishga imkon beradi, balki uning barcha faoliyat elementlarini ham tartibga soladi. Tizim alohida elementlarni va butun tizimni boshqaradi. Hozirgi kunda elektron deklaratsiyalar ham yaratilmoqda. Endi soliq to'lovchilarga soliq deklaratsiyasini elektron shaklda topshirish imkoniyati mavjud va bu, shubhasiz, ularni soliqlarni yig'ish jarayonini osonlashtiradi. Bu usldan foydalanish ancha afzallikka ega bo'lmoqda chunki soliq to'lovchilar endi soliq idoralariga tashrif

buyurishi shart emas. Shuningdek, o‘z navbatida, soliq inspeksiyasi kiruvchi ma‘lumotlarni qo‘lda qayta ishlash bilan shug‘ullanmaydi, chunki soliq tizimida axborot texnologiyalaridan foydalanib avtomatlashtirilgan axborot tizimini modernizatsiya qilish imkoniyati mavjud.

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Rasulova M.B.
“O’simliklar karantini va himoyasi” kafedrası assistenti
Andijon qishloq xo’jaligi va agrotexnologiyalar instituti

TARVUZNING ZAMBURUG‘ KASALLIKLARI VA ULARGA QARSHI SAMARALI KURASH USULLARI

Annotatsiya. Ushbu maqolada tarvuzning kasallik qo‘zg‘atuvchi patogen Tarvuzning fuzarioz so‘lishi (fuzarioz vilt)ni Fusarium oxysporum Schl. f. niveum Wr. Antraknoz kasalligi Colletotrichum lagenarium Ellis et Halsted zamburug‘larining tarqalishi, zarari va ularga qarshi samarali kurash usullari haqida ma’lumotlar berilgan.

Kalit so‘zlar: tarvuz, fuzarioz so‘lish, Fusarium oxysporum Schl. f. niveum Wr. Antraknoz kasalligi, Colletotrichum lagenarium Ellis et Halsted, zamburug‘larining tarqalishi, zarari, qarshi kurash usullari.

Rasulova M.B.
assistant
"Plant quarantine and protection" department
Andijan Institute of Agriculture and Agrotechnologies

FUNGI DISEASES OF WATERMELON AND EFFECTIVE METHODS OF FIGHTING AGAINST THEM

Annotation. In this article, the disease-causing pathogen of watermelon Fusarium wilt of watermelon (fusarium wilt) is caused by Fusarium oxysporum Schl. f. niveum Wr. Anthracnose disease Colletotrichum lagenarium Ellis et Halsted fungi distribution, damage and effective methods of combating them are given.

Key words: watermelon, fusarium wilt, Fusarium oxysporum Schl. f. niveum Wr. Anthracnose disease, Colletotrichum lagenarium Ellis et Halsted, spread of fungi, damage, control methods.

Kirish. Poliz ekinlaridan O‘zbekiston sharoitida yuqori hosil olish, kasallik va zararkunandalarni yo‘qotish, mavjud imkoniyatlardan to‘g‘ri foydalanish hozirgi kunda muhim ahamiyat kasb etadi. Bu sohasini serdaromad, kam xarajatli sohaga aylantirish, ekish xarajatlarini kamaytirish, yuksak agrotexnikadan foydalanish, saqlashning kam harajatli yangi usullarini yaratish bilan bir qatorda havfli kasalliklarga qarshi samarali pestitsidlarni kam normalarida qo‘llash, iqtisodiy zarar keltirishini hisobga olgan holda uyg‘unlashgan himoyadan foydalanishga katta e’tibor berish zarur.

O'simliklarning zamburug'lar qo'zg'atadigan kasalliklari hosil sifati va miqdoriga salbiy ta'sir ko'rsatib qolmasdan, balki ularni ko'p hollarda butunlay nobud qilishi mumkin. Shu sababli fitopatogen mikroorganizmlarga qarshi samarali kurash choralarini ishlab chiqish fan va ishlab chiqarishning doimo diqqat markazida turadi.

O'zbekiston, Tojikiston, Turkmaniston, Qirg'iziston va Janubiy Qozog'istonda qovun yetishtirishda eng katta zarar keltiradigan va soha rivojlanishiga to'siq bo'lib kelayotgan ikkita zamburug' kasalliklari mavjud bo'lib, ular un-shudring va fuzarioz so'lishdir.

Tarvuzning fuzarioz so'lishi (fuzarioz vilt)ni *Fusarium oxysporum Schl. f. niveum Wr.* takomillashmagan zamburug'i qo'zg'atadi. Kasallik qovun, tarvuz va bodringning maysalari va katta yoshli o'simliklarini zararlaydi. Maysalarning urug'pallasi so'liydi, ildizi yoki poya asosi chiriydi, natijada ko'pincha ular yalpi yotib qoladi

Fuzarioz so'lish bilan tarvuz barcha o'sish va rivojlanish fazalarida zararlanadi. Ekin odatda mavsumning ikkinchi yarmida, to'la hosilga kirgan paytida ko'proq zararlanadi. Yosh maysalarning urug'baglari, poyasi va ildiz bo'g'zida qaynoq suvga kuyganga o'xshash, rangsiz, so'ngra qo'ng'ir tus oluvchi dog'lar rivojlanadi, ular chiriydi va maysalar qurib qoladi, ekin siyrak bo'lib qoladi. Kasallangan katta yoshli o'simliklar yaxshi rivojlanmaydi, ko'pincha so'liydi va so'ngra nobud bo'ladi. Poya va ildizi kesib ko'rilganda o'tkazuvchi naylarning qorayganligi kuzatiladi. Ba'zan sog'lom bo'lib ko'ringan o'simliklar kechasi nobud bo'ladi. Ertapishar navlar maysalarining 43-86 foizi nobud bo'lgani O'zbekistonda qayd etilgan.

Oldin o'simlikning pastki yarusdagi barglarida sarg'ish, so'ngra qo'ng'ir tus oluvchi dog'lar paydo bo'ladi va ular yuqori yarus barglariga o'tadi. Palaklardan biri yoki bir nechtasi, so'ngra butun o'simlik so'ladi. Ildiz po'sti titilgan shakl oladi, usti kukunga o'xshab qoladi. Ba'zan o'simlik kasallikka mavsum so'ngigacha qarshilik ko'rsatadi, so'lmaydi, ammo ular zaif, palagi kalta bo'lib qoladi, kam hosil tugadi. Kasallikning tez rivojlanuvchi shakli kuzatilganda o'simlik 1-2 kun ichida so'lib qoladi. Namlik yetishmasligi (yetarlicha sug'ormaslik) kasallikni juda kuchaytiradi.

So'lishning sababi - o'simlikning o'tkazuvchi tomirlari zamburug' mitseliysi bilan to'lishi va suv o'tmay qolishidir. So'ligan o'simliklarning ildizi va poyasi kesib ko'rilganda, ularda sarg'ish, jigarrang va qo'ng'ir dog'larni ko'rish mumkin, ammo bu dog'lar har doim mavjud bo'lmaydi. Kasallikning rivojlanishiga tuproqning past xarorati (16-18⁰S) va past namlik imkon beradi. Patogen tuproqda sklerotsial xosilalar va xlamidospora shaklida saqlanadi.

Kasallikka qarshi kurash choralari. Kasallik mavjud bo'lgan dalalarga 4-5 yilgacha tarvuz ekmaslik; so'lishga chidamli navlar ekish; urug'likni faqat sog'lom o'simlik mevalaridan olish, ekishdan oldin uni mikroelementlar (Fe, B, Zn, Mn, Cu) eritmasida ivitish, quritish va samarali fungitsid (misol uchun, Vitavaks 200 FF) bilan dorilash; tarkibida elementlar balansi mavjud bo'lgan

o'g'itlarni kiritish; o'simlik qoldiqlarini daladan chiqarib, yoqib yuborish tavsiya qilinadi.

O'zbekistonda ekinga superfosfatning 5% li eritmasini 3 marta (ekin 4-10 barg chiqarganda, gullash-meva tugish paytida hamda mevalar pisha boshlaganda) purkash kasallikka qarshi yaxshi natija bergan.

Antraknoz kasalligi tarvuz, qovun, bodring va ba'zan qovoqni zararlaydi. Antraknoz kasalligi issiqxona va dala sharoitida uchrab, o'simlikning barcha yer usti a'zolarini zararlaydi. Bargning kasallangan joyida dumaloq, sarg'ish dog'lar paydo bo'lib, bu dog'lar keyinchalik teshilib qoladi.

Poyada dog'lar uzunchoq, qo'ng'ir sarg'ish rangda bo'lib, botiq xosil qiladi. Bu belgilar mevada dastlab kichik shaklda xosil bo'lsa, keyinchalik shakli yiriklashib, chuqurlashadi. Mevalarda dog'lar xilma xil o'lchamda ko'rinadi: dastlab ular mayda, qo'ng'ir, ammo keyinchalik tezda kattalashadi, chuqurlashadi va yaralarga aylanadi. Yaralarning yuzasida pushtisimon sporadastalar xosil bo'ladi. Kuzga borib dog'lar to'q tusga kiradi. Yosh paytida zararlangan mevalar ko'pincha deformatsiyaga uchraydi.

Kasallikni *Melanconialis tartibi* vakili *Colletotrichum lagenarium* Ellis.et Halsted takomillashmagan zamburug' turi keltirib chiqaradi.

Kasallangan joyda zamburug' konidialarni xosil qiluvchi loja xosil qiladi. Unda rangsiz, bir xujayrali o'lchami 10-30x3-5 mkm konidiya bandlarida tuxumsimon, silindrsimon shakldagi o'lchami 11-20x3,6-6,5 mkm kattalikdagi konidialarni xosil qiladi. Zamburug' bargga ustitsalar vositasida va shikastlangan joy orqali kirib keladi.

Kasallikning inkubatsiya davri namlik va xaroratga bog'liq ravishda 3-6 kun davom etadi. Uning konidialari 4 dan 36⁰S gacha bo'lgan xaroratda (qulay chegarasi 24-25⁰S) va xavoning nisbiy namligi 60 dan 100% gacha bo'lganda o'sishi mumkin. Tik tushgan quyosh nurlari antraknozni to'xtatib qo'yadi, kasallikning soya joylarda kuchli rivojlanishi aynan mana shu xolat bilan tushuntiriladi.

Kasallikning yetkazadigan zarari barglar assimilyatsiya qobiliyatining susayishi va aloxida o'simliklarning yotib qolishi, xosildorlik va maxsulot sifatining pasayishi bilan ifodalanadi. Mazkur kasallik tarvuz, qovun va bodring mevalarida ularni tashish va saqlashda kuchli rivojlanadi.

Kurash choralari. Kasallikka chidamli navlarni ishlab chiqarishga joriy qilish va almashlab ekishga to'g'ri rioya etish tizimning muxim bo'g'ini xisoblanadi. Antraknoz, fuzarioz va boshqa kasallik qo'zg'atuvchilarining tuproqda uzoq yashashini xisobga olgan holda qovoqdosh ekinlarni dastlabki joyiga eng kamida 4-5 yildan keyin ekishga ruxsat etiladi. Ekinni baland jo'yaklarning yon tomonlariga ekish tavsiya qilinadi. Dalalarda poliz ekinlari har 4-5 yilda qayta joylashtirish nazarda tutiladigan almashlab ekishni yo'lga qo'yish tavsiya qilinadi

Poliz ekinlarining hosildorligini oshirishning asosiy omillaridan biri – bu serhosil, turli kasallik, hasharotlar, ekstrimal sharoitga chidamli navlar urug'larini

tanlab ekish va ekinlarni yuqori texnologiya asosida parvarishlashdir.

Poliz ekinlaridan yuqori hosil olish uchun uyg'unlashgan kurash tizimida tashkiliy-xo'jalik, agrotexnik tadbirlar hamda kimyoviy va biologik kurash choralarini reja asosida o'z vaqtida qo'llash muhim ahamiyat kasb etadi.

Urug'lar faqatgina sog'lom maydonlar va zararlanmagan mevalardan olinadi. Urug'larning mog'orlashi, maysalarning yotib qolishi, fuzarioz ildiz chirishi, fuzarioz so'lish, antraknoz, bakterioz va boshqa kasalliklarga qarshi urug'lar pestitsidlar bilan dorilanadi. Namlangan (1 t urug'ga 10 l suv) urug'larni mazkur preparat bilan dorilash ekishdan 2-3 oy oldin o'tkaziladi.

Himoyalangan joylarda issiqxona ichini dezinfeksiyalash, tuproq, idishlar va asbob-anjomlarni zararsizlantirish, xosil yig'ib olingandan keyin o'simlik qoldiqlarini yo'qotish, karantin tadbirlariga amal qilish zaruriy tadbirlar xisoblanadi.

Issiqxona va ochiq dalada fuzarioz so'lish yoki ildiz chirishi qayd etilsa, mazkur o'simliklar tuprog'i bilan birgalikda kavlab olinadi va yo'qotiladi. Qo'shni sog'lom o'simliklar tuprog'i yumshatiladi, issiqxonaga esa qum sepiladi, bu tadbir qo'shimcha ildizlarning xosil bo'lishini ta'minlaydi.

Kasallik rezervatorlari va tashuvchilari bo'lgan begona o'tlar va xasharotlarga qarshi tizimli kurashiladi.

Hosilni yig'ib olishda mevalarning mexanik shikastlanishiga yo'l qo'ymaslik lozim. Bu ayniqsa tarvuz, qovun va bodring mevalarini tashish va saqlashda rivojlanuvchi antraknoz kasalligiga qarshi juda muximdir.

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Raxmanova M.
Guliston davlat universiteti o'qituvchisi

EKOLOGIT KOMPETENSIY: MAZMUNI, TUZILISHI, XUSUSIYATLARI

Annotatsiya: XX asrning ikkinchi yarmidan boshlab. Ekologik muammo o'z ko'lami va ahamiyatiga ko'ra butun sayyorani qamrab olgan global muammolardan biriga aylandi. Ushbu muammoning strategik yechimi sifatida BMTning qarori bilan tuzilgan Atruf-muhit va rivojlanish bo'yicha xalqaro komissiya barqaror rivojlanish konsepsiyasini taklif qildi. 1992 yilda Birlashgan Millatlar Tashkilotining Atruf-muhit va rivojlanish bo'yicha konferensiyasida (Rio-de-Janeyro "Kun tartibi 21") Barqaror rivojlanish kontsepsiyasini amalga oshirish bo'yicha harakatlar dasturi ko'pgina mamlakatlar rahbarlari tomonidan tasdiqlangan. 36-moddasi 21-kun tartibida ekologik ta'lim va ekologik kompetensiya dasturi amal sifatida belgilab qo'yildi va loyihasi ishlab chiqildi. Ushbu maqolada ekologik kompetensiyasini yoritish borasida ko'plab olimlar ishlari tahlil qilib o'rganildi va xulosa ishlab chiqildi.

Kalit so'zlar: Ekologik kompetensiya, ekologik ong, epistemologik yondashuv, motivatsion komponent, kognitiv komponent, hissiy-irodaviy komponent, qiymat-semantik komponent.

Rakhmanova M.
teacher
Gulistan State University

COMPETENCE OF ECOLOGIST: CONTENT, STRUCTURE, CHARACTERISTICS

Abstract. From the second half of the 20th century. The environmental problem has become one of the global problems, covering the entire planet due to its scale and importance. As a strategic solution to this problem, the International Commission on Environment and Development, created by decision of the UN, proposed the concept of sustainable development. In 1992, at the UN Conference on Environment and Development (Rio de Janeiro Agenda 21), a program of action to implement the concept of sustainable development was approved by the leaders of many countries. In the 21st agenda of Article 36, the environmental education and environmental competence program was defined as an action and a project was developed. This article analyzes the work of many scientists and draws conclusions regarding the scope of environmental competence.

Key words: Environmental competence, environmental consciousness, epistemological approach, motivational component, cognitive component, emotional-volitional component, value-semantic component.

Kirish. Ekologik kompetentsiya ko‘p o‘lchovli tushunchadir, uning mazmuni ko‘plab omillarga bog‘liq [1]. Ekologik kompetentsiyaning mohiyatini va shunga mos ravishda kompetentsiyani aniqlash uchun ushbu tushunchalarning ekologik psixologiya va pedagogika toifalari tizimidagi munosabatlarini tahlil qilish kerak [2].

Markaziy element berilgan tizimlari hisoblanadi tabiatga zarar keltirmaydigan shaxsiyat - shaxsiyat, egalik qilish ekosentrik turi ekologik ong va quyidagi xususiyatlar bilan tavsiflanadi: psixologik ishtirok V dunyo tabiat, sub'ektiv xarakter idrok tabiiy ob'ektlar, tabiiy dunyo bilan pragmatik bo‘lmagan o‘zaro ta'sir qilish istagi. Vakolatlilik doirasida yondashuv mumkin ishoning, Nima ahamiyatli xususiyat tabiatga zarar keltirmaydigan shaxslar hisoblanadi ekologik malaka, vakili ekologik kompetentsiyaning o‘ziga xos individual ko‘rinishidir.

Asosiy qism. Ekologik kompetentsiyaning mohiyatini aniqlash uchun ekologik tadbirlar (ekologik ong, ekologik fikrlash va ekologik qadriyatlar) asos toifa hisoblanadi: [3]. "Atrof-muhit faoliyati" tushunchasini hisobga olgan holda, uning talqin qilinishini ta'kidlash kerak [4]. Biroq, har qanday holatda ham, inson shaxsiyatining asosi uning dunyoga bo‘lgan munosabatlari yig‘indisi ekanligidan kelib chiqqan holda, ularning kompleks faoliyati orqali amalga oshiriladi. [5;6]. Ekologik faoliyatni aks ettiruvchi ijtimoiy faoliyatning tarkibiy qismi sifatida tabiat va jamiyat munosabatlarni ko‘rish mumkin. Ushbu faoliyat subyekt ham obyekt ham ularning o‘zaro ta'siri, ya'ni ekologik muhit Demak, ekologik faoliyat shartlari ushbu o‘zaro ta'sir usuli bilan bog‘liq insondir

Inson faoliyatining boshqa har qanday shakllari singari, ekologik faoliyat ham ong sifati (ekologik ong) belgilanadi. Bu esa insonga nafaqat o‘zgartiradigan yoki o‘zgartiradigan, balki ekologik muhitni yaratadigan sub'ektning xususiyatlarini olish imkonini beradi.

Ekologik ongni aniqlashning ikkita yondashuvi mavjud [7], ular ekologik savodxonlikdan farqli ravishda ekologik kompetentsiyaning mohiyatini tushunish uchun juda samarali bo‘lib tuyuladi. *Epistemologik yondashuv* – ekologik ongdagi fundamentallik tarbiyaviy munosabatni shakllantiruvchi yondashuv. Ekologik ongdagi gnoseologik tipni aks ettirish va tartibga solish funksiyalarini bajaradi, unga vositachilik qiladi va ayni vaqtda maqsadga erishtiruvchi faoliyatni belgilaydi.

Kompetentsiyaning ontologik mohiyati shundan iboratki, u inson va uni o‘rab turgan muhitni keng diapozonda idrok qilishdir.

Shunday qilib, ekologik kompetentsiyani rivojlantirish jarayonining harakatlantiruvchi kuchlari ekologik ziddiyatlarni hal qilishdir, masalan, insonning ekologik jihatdan qulayroq, xavfsiz sharoitlarda yashash istagi va

buning uchun sharoit va imkoniyatlarning yo'qligi. Ushbu turdagi qarama-qarshiliklar ekologik faoliyatda hal qilinadi, ularning ob'ekti, predmeti va mazmuni ta'lim mazmunining tarkibiy qismlari shaklida taqdim etilishi ekologik kompetentsiyani belgilaydi.

Aloqa ekologik kompetensiyalar bilan boshqalar toifalar ekologik psixologiya va pedagogika taxmin qiladi Keyingisi mantiq. Ekologik bilim, o'rgangan talabalar va jarayon ekologik ta'lim, kundalik hayotda shakllangan ekologik g'oyalar ogohlikka hissa qo'shadi ahamiyati ekologik muammolar, tushunish qiymatlar tabiat. Bilim va qadriyatlar ekologik ongning shakllanishiga ta'sir qiladi va o'zgaradi va e'tiqodlar, qaysi piyon asos ekologik dunyoqarash. O'z navbatida, dunyoqarash shaxsning ideallarini belgilaydi, munosabatini belgilaydi Kimga tabiat, qaysi paydo bo'ladi va ekologik tadbirlar — harakatlar, harakatlar, xatti-harakati, odatlar. Boshqalar so'zlar, ekologik xulq-atvor oqibatidir amalga oshirish mazmuni ekologik ong.

Ekologik kompetentsiyaning mazmuniga ko'ra bir qancha olimlar quyidagi turlarga ajratgan:

- motivatsion, kognitiv, faollik (L.E. Pistunova);
- mazmunli, faoliyatga asoslangan, shaxsiy (L.V. Panfilova);
- uslubiy, motivatsion-qiymatli, kognitiv-axborot, prognostik (A.I. Novik-Kachan);
- ekologik-kognitiv, ekologik-motivatsion, axloqiy-ijtimoiy, kasbiy-xulq-atvor (V.A. Danilenkova);
- Kognitiv, operatsion, ehtiyoj-motivatsion, qiymat-semantik (A.A. Makoedova);
- ilmiy blok, integrativ shaxs sifatleri bloki, malakalar bloki (S.N. Glazachev);
- motivatsion, intellektual, hissiy-irodaviy, predmetli-amaliy quyi tuzilmalar (F.S. Gaynullova).

Ong va faoliyatning psixologik birligi tamoyiliga asoslanib, kasbiy kompetensiyalar tarkibini o'rganishga asoslangan [5; 8], ekologik kompetentsiya tuzilmasini besh komponent shaklida taqdim etish tavsiya etiladi: qiymat-semantik, motivatsion, kognitiv, amaliy-faol, hissiy-irodali.

Ekologik kompetentsiya mazmunini tanlashda ikkita asosiy yondashuv mavjud. *Substantiv yondashuv* - kompetentsiyaning aniq o'quv predmeti, ushbu yondashuvga tegishli kompetentsiyani (bilim, qobiliyat, ko'nikma) shakllantirishga qo'shgan hissasini aniqlashtirish faoliyati[11]. Shubhasiz, ushbu protsedura kompetensiyaga asoslangan yondashuvning innovatsion imkoniyatlarini sezilarli darajada toraytiradi, chunki u faqat an'anaviy ta'lim mazmunini qayta qurish va bir oz integratsiyalashuviga olib keladi.

Albatta, ekologik kompetentsiya mazmunini loyihalash va amalga oshirishda umumta'lim davlat standarti talablarini hisobga olish zarur, bunda ayrim fanlar (tabiatshunoslik, biologiya, kimyo, fiziklar, geografiya, texnologiyalar, tarix, ijtimoiy fanlar)ning ekologik kompetensiyalari individual

tarkibiy qismlarini shakllantirish zarurati ko'rsatilgan: maqsadlar, mazmun, kognitiv va amaliy faoliyat tajribasi [10].

Funksional-maqsadli yondashuv - kompetentsiyaga asoslangan paradigmaning mohiyatiga ko'proq mos keladi [1]. Bu yondashuvda kompetensiya mazmunini aniqlash tartibi, birinchi navbatda, insonning ijtimoiy ahamiyatini aniqlash (faolness)ni o'z ichiga oladi (nazariy va uslubiy asoslash, tarixiy-pedagogik tahlil, ekspertiza va tahlili). Shu asosda, kompetensiyalar tilida bashorat qilingan ta'lim natijalari aniqlanadi.

Funksional-maqsadli yondashuv doirasida umumta'lim davlat standarti talablarini, kasbiy ekologik faoliyatning o'ziga xos xususiyatlarini va ekologlar tomonidan o'tkazilgan ketaxizik so'rov natijalari [4] hisobga olgan holda, ekologik kompetentsiyaning mazmuni umumiy o'rta ta'lim darajasini quyidagicha ko'rsatish mumkin.

1. *Motivatsion komponent* ekologik faoliyatni amalga oshirishni rag'batlantiradigan manfaatlar va ehtiyojlarning kombinatsiyasini o'z ichiga oladi: xavfsizlik ehtiyojlari (barcha tirik mavjudotlar mavjudligi uchun qulay sharoitlar, o'z hayoti va sog'lig'ini saqlash); kognitiv ehtiyojlar (o'z faoliyatini tabiiy jarayonlarga uyg'un ravishda integratsiya qilish uchun tabiatni bilish); estetik ehtiyojlar (tabiat bilan ma'naviy aloqa, atrofdagi dunyoning go'zalligini ko'rish va amalga oshirish, uni saqlash va himoya qilish istagi) [9]; mafkuraviy ehtiyojlar (odamning dunyodagi o'rni va maqsadini, o'z hayotining ma'nosini tushunish va shunga muvofiq o'z faoliyatini qurish istagi); o'z-o'zini namoyon qilish va o'z ichki salohiyatini, shu jumladan ekologik faoliyat va ekologik ta'lim orqali amalga oshirish zarurati.

2. *Kognitiv komponent* atrof-muhit tizimini shakllantirishni o'z ichiga oladi bilim (tabiiy fanlar, mafkuraviy, me'yoriy, huquqiy, amaliy), indikativ asos bo'lib xizmat qiladigan fikrlash usullari ekologik tadbirlar (kognitiv muammolar, modellashtirish, haqiqatni amaliy o'zgartirish); ekologik toza texnika va turmush tarzini o'zlashtirish; tabiat-inson-ekologik muhitning qadriyat munosabatlarini shakllantirishga oid tadbirlarni amalga oshiruvchi kompetensiyaviy yondashuv.

Biologiya fanidan zamonaviy ekologiya geografiya, geologiya, kimyo, fizika, sotsiologiya, madaniyat nazariyasi, iqtisod, huquq elementlarini o'zlashtirgan holda yaxlit kompleks tizimga aylandi.

3. Ekologik kompetensiya tarkibidagi *amaliy-faoliyat komponenti quyidagilarni nazarda tutadi: ekologik muammolarni aniqlash, hal qilish va oldini olish, atrof-muhit holatini yaxshilashda ekologik bilimlarni amalda qo'llash qobiliyati*; ekologik faoliyatda amaliy tajribaning mavjudligi. Shu bilan birga, ekologik muammolarni hal qilishning oqilona tartiblarini shakllantirish (loyihalash, xavflarni tahlil qilish, qarorlar mezonlarini ishlab chiqish, faoliyatni o'z-o'zini baholash) katta ahamiyatga ega [8].

4. Insonning tabiat bilan ongli yoki ongsiz birligida, uyg'unlik hissidan quvonchni his qilishda ifodalangan tabiatga, ekologik muammolarga va ularni hal qilishga munosabatni belgilaydigan *hissiy-irodaviy komponent* alohida

ahamiyatga ega. Bu munosabatlar insonning xulq-atvori va faoliyatini tartibga soluvchi omil bo'lib xizmat qiladi. Ular shaxsning maqsadlari, ideallari va munosabatlarida topiladi va hissiyotlar bilan ranglanadi, shaxsning faoliyatga munosabatini shakllantiradi va uni amalga oshirish vositalarini tanlaydi [10].

5. *Qiymat-semantik komponent* qiymat yo'nalishlarining mavjudligini, tabiiy muhitni eng muhim qadriyat sifatida saqlash zarurligini anglashni belgilaydigan ekologik faoliyatning ma'nolarini tushunishni nazarda tutadi; ekologik faoliyatning ijtimoiy va shaxsiy ahamiyatini tushunish; xavfsizlik muhiti; ongli fuqarolik; atrof-muhitni muhofaza qilishda faol ishtirok etishga tayyor tadbirlar, ekologik voqealar; mas'uliyat orqasida o'zining ekologik faoliyati natijalari, transformatsiyalar va atrof-muhitni muhofaza qilish sohasida qabul qilingan qarorlar.

Shaxsning "filtrlari" u tomonidan o'ziga xos baholash va kontseptual toifalarga, munosabat va xulq-atvor dasturlariga aylanadi. Faqat inson tomonidan e'tirof etilgan qadriyatlar (tabiat qiymati, atrof-muhit faoliyati) yo'nalishlari va ma'nolariga aylanadi, ular orqali atrof-muhit faoliyatining tashqi xususiyatlari va talablari vakolatga aylanadi [11].

Xulosa. Shunday qilib, taklif etilayotgan ekologik kompetentsiya modeli ekologik ta'limni bilimlarni shakllantirishga emas, balki, birinchi navbatda, insonni o'rab turgan atrof-muhit holatini yaxshilash, ekologik muammolarni aniqlash va hal qilishda yordam berish, bu jarayonda yangi maqsadlar, baholar, motivlar, munosabatlar, ma'nolar shaklida ruhiy yangi shakllanishlar paydo bo'ladi.

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*Raxmatov Ya.Ya.
O‘zbekiston Respublikasi Vazirlar Mahkamasi
huzuridagi Biznes va tadbirkorlik oliy maktabi magistri*

**PROFESSIONAL TA’LIM TIZIMIDA MALAKALI KADRLAR
TAYYORLASH NATIJASIDA KICHIK BIZNES VA
TADBIRKORLIKNI RIVOJLANTIRISH**

Annotatsiya. Ushbu maqolada Kichik biznes va xususiy tadbirkorlikni rivojlantirishda professional ta’limning ahamiyati va uning hayotda tutgan o’rni haqida so’z yuritiladi.

Kalit so’zlar: Harakatlar strategiyasi, zamonaviy innovatsiyalar, kasb-hunar maktablari, kollejlari, texnikumlar, biznes, xususiy tadbirkor.

*Rakhmatov Ya.Ya.
Cabinet of Ministers of the Republic of Uzbekistan
Master of the Higher School of Business and Entrepreneurship*

**DEVELOPMENT OF SMALL BUSINESS AND ENTREPRENEURSHIP
AS A RESULT OF TRAINING QUALIFIED PERSONNEL IN THE
PROFESSIONAL EDUCATION SYSTEM**

Abstract. This article talks about the importance of professional education in the development of small business and private entrepreneurship and its role in life.

Key words: Action strategy, modern innovations, vocational schools, colleges, technical schools, business, private entrepreneur.

Bugungi kunda mehnat bozoridagi ehtiyojlar, masalan, kichik biznes va xususiy tadbirkorlik subyektlari uchun raqobatbardosh kadrlarni professional ta’lim bosqichlarini joriy qilish orqali tayyorlash hamda turli yoshdagi kishilarning “Umri davomida ta’lim olish” usuli yordamida ta’lim olishga bo’lgan talablarini qondirish professional ta’limning maqsadi hisoblanadi. Prezidentimiz Sh.M. Mirziyoyevning “2019-2021 yillarda O‘zbekiston Respublikasini innovatsion rivojlantirish strategiyasini tasdiqlash to’g’risida”gi Farmonida “Jamiyat va davlat hayotining barcha sohalari shiddat bilan rivojlanayotgani islohotlarni mamlakatimizning jahon sivilizatsiyasi yetakchilari qatoriga kirish yo’lida tez va sifatli ilgariylashini ta’minlaydigan zamonaviy innovatsion g’oyalar, ishlanmalar va texnologiyalarga asoslangan holda amalga oshirishni taqozo etadi”⁶⁵- deb alohida ta’kidlangan. Harakatlar strategiyasida mehnat bozori mutanosibligini va infratuzilmasi rivojlanishini ta’minlash, mehnatga layoqatli

⁶⁵ <https://lex.uz/docs/-3913188>

aholining mehnat va tadbirkorlik faolligini to'liq amalga oshirish uchun qulay shart-sharoitlar yaratish, ishchi kuchi sifatini yaxshilash, ishga muhtoj shaxslarni kasbga tayyorlash tizimini kengaytirish vazifalari belgilangan⁶⁶. Bu borada yurtimizda amalga oshirilayotgan keng miqiyosdagi islohotlar Respublika iqtisodiyotida bir muncha sezilarli rivojlanish ko'zga tashlandi, rivojlanish jihatdan jiddiy tarkibiy o'zgarishlar amalga oshdi. Iqtisodiyotning barcha soxalariga zamonaviy innovatsion texnologiyalar shiddat odimlamoqda. Sanoatda, qishloq xo'jaligida, transport va xizmat ko'rsatish sohalarida yuqori qiymat, yuqori hosildorlik, unumdorlik va tejamkorlikni ta'minlovchi zamonaviy texnologiyalar, ishlab chiqarish sohasida juda keng ko'lamdagi innovatsiyalar tadbiriq qilinmoqda. Ushbu jarayonlarga milliardlab AQSh dollari miqdorida xorijiy investitsiyalar jalb qilinmoqda va minglab yangi ish o'rinlari yaratilmoqda. Birgina 2019 yilning o'zida barcha moliyalashtirish manbalari hisobidan jami 220,7 trillion so'mlik investitsiyalar o'zlashtirildi, shundan asosiy kapitalga investitsiyalar hajmi 189,9 trillion so'm ekanligi va bu 2018 yilgi ko'rsatkichlariga nisbatan 1,3 barobar o'sganligi yaqin kelajakda mazkur loyihalar yuqori malakali professional kadrlarning yangi avlodi yetishib chiqishi zarurligini belgilab bermoqda⁶⁷. Shu bilan birga, xalqaro mehnat bozori talablari, integratsion jarayonlarning jadallashuvi, raqamlashtirish, sanoatdagi texnologik inqiloblar davrida zamon talablariga mos bilim va ko'nikmalarga ega bo'lgan raqobatbardosh mutaxassislarini tayyorlashni, kasb-hunar ta'lim sohasida yangi tizimni - xalqaro andozalarga mos professional ta'lim tizimini talab qildi. Natijada kasb-hunar ta'limi tizimida ham davlat siyosati tubdan o'zgardi. Prezidentimiz tomonidan sohada tub islohotlarni amalga oshirish va zamonaviy professional ta'lim tizimini yaratishning maqsad va ustuvor vazifalari, bir so'z bilan aytganda, tizimning yangi yo'nalishi belgilab berildi. Ushbu yo'nalish mohiyati yangi sifat va formatda inson resurlarini yanada rivojlantirish, yoshlarda ichki va tashqi mehnat bozori talab qilayotgan amaliy kvalifikatsiyalarni shakllantirish, ularning Ona Vatanga bo'lgan sevgisini, xalqiga sadoqatini yanada rivojlantirishdan iboratdir. Shu tariqa tizim oldiga quyidagi vazifalar qo'yildi:

- hududlar va sohalar kesimida iqtisodiy taraqqiyotga munosib hissa qo'sha oladigan o'rta bo'g'in kadrlarini tayyorlash;

- yoshlarni malakali mehnat orqali o'z hayot farovonligini ta'minlashga o'rgatish;

- o'z mehnat faoliyatiga innovatsion va kreativ yondashish, yaratuvchanlik, intellektual, madaniy, ma'naviy potensialni rivojlantirish kabi kompetensiyalarni shakllantirish metodologiyasini yaratish.

Ana shu missiya va maqsadlarni ko'zlab, Prezidentimizning 2019-yil 6-sentyabrda "Professional ta'lim tizimini yanada takomillashtirishga doir

⁶⁶ <https://review.uz/uz/post/2016-2021-yillarda-mehnat-bozorida-amalga-oshirilgan-ishlar-va-erishilgan-natijalar-sharhi>

⁶⁷ [Review.uz/uz](https://review.uz/uz)

qo'shimcha chora-tadbirlar to'g'risida"gi Farmoni⁶⁸ qabul qilindi. Mazkur Farmon O'zbekiston tarixida yangi professional ta'lim tizimini tashkil etishga asos bo'lgan bo'lsa, 2020-yil 24-yanvarda davlatimiz rahbari o'z Murojaatnomasida "Joriy o'quv yilidan boshlab, mutlaqo yangi professional ta'lim tizimi yo'lga qo'yilib, kasb-hunar maktablari, kollejlari va texnikumlar tashkil etiladi" deb mazkur tizimning ahamiyatini yana bir bor alohida ta'kidladi⁶⁹. Bunda iqtisodiyotning barcha tarmoqlari barobarida tadbirkorlik, kichik biznes, oilaviy biznes, tomorqa biznesi, qurilish, xizmat ko'rsatish, chorvachilik, parrandachilik, asalarichilik, baliqchilik kabi tez sur'atlarda ravnaq topayotgan sohalar uchun ishchi kasblar bo'yicha malakali kadrlar tayyorlanishi ko'zda tutildi. O'z navbatida, yangi tizimning barcha huquqiy-meyoriy asoslari yaratildi. Jumladan, yaqinda "O'zbekiston Respublikasida uzluksiz boshlang'ich, o'rta va o'rta maxsus professional ta'lim tizimini tartibga soluvchi normativ-huquqiy hujjatlarni tasdiqlash to'g'risida"gi hukumat qarori e'lon qilindi⁷⁰. Qaror bilan uzluksiz boshlang'ich, o'rta va o'rta maxsus professional ta'lim to'g'risidagi nizom⁷¹, Boshlang'ich professional ta'lim bosqichida kadrlar tayyorlaydigan kasb-hunar maktablarining namunaviy ustavi⁷², O'rta professional ta'lim bosqichida kadrlar tayyorlaydigan kollejlarning namunaviy ustavi⁷³ hamda O'rta maxsus professional ta'lim bosqichida kadrlar tayyorlaydigan texnikumlarning namunaviy ustavi⁷⁴ tasdiqlandi. Ko'rsatib o'tilgan hujjatlar asosida o'quv jarayoni xalqaro standartlarga muvofiqlashtirilgan ta'lim dasturlari asosida tashkil etiladigan 3 ta toifadagi ta'lim muassasalari faoliyati yo'lga qo'yiladi. Joriy etilayotgan yangi tizim xalqaro andozalarga to'la mos bo'lishi uchun 14 ta xalqaro tashkilot bilan hamkorlikda rivojlangan xorijiy mamlakatlarning ilg'or tajribalari o'rganildi. Germaniya, Shveysariya, Koreya, Turkiya va Xitoy hamda YuNESKO, Britaniya Kengashi, Germaniya xalqaro hamkorlik jamiyati, Osiyo taraqqiyot banki, Yevropa ta'lim fondi, Turkiya hamkorlik agentligi, Xitoyning Universitetlar uyushmasi kabi qator xorijiy davlat va tashkilotlardan 200dan ortiq nufuzli xalqaro ekspertlar jalb qilindi. Yangi professional ta'lim muassasalarida ta'lim mazmuni, soni va sifati, ta'lim dasturlari, texnologiyalarining isloh qilinishi oqibatida bir qancha o'zgarishlar amalga oshirildi. Birinchidan, 2020/2021-o.,quv yilida professional ta'lim tizimida respublika bo'yicha jami 725 ta ta'lim muassasasi, ya'ni 339 ta kasb-hunar maktabi, 200 ta kollej va 186 ta texnikum faoliyat ko'rsatishi belgilandi. 1-toifa - kasb-hunar maktablarida ta'limning xalqaro standart tasniflagichining 3-darajasiga mos keluvchi 2 yillik ta'lim dasturlari asosida 9-sinf bitiruvchilari boshlang'ich professional ta'lim oladi.

⁶⁸ <https://lex.uz/docs/-4500926>

⁶⁹ 2020-yil 24-yanvar kuni Prezident Shavkat Mirziyoyev O'zbekiston Respublikasi Oliy Majlisiga joriy yil va kelgusidagi mamlakatimiz taraqqiyotining eng ustuvor vazifalari to'g'risida Murojaatnomasi

⁷⁰ <https://lex.uz/docs/-4945840>

⁷¹ <https://lex.uz/docs/-4945840>

⁷² <https://lex.uz/docs/-4945840>

⁷³ <https://lex.uz/docs/-4945840>

⁷⁴ <https://lex.uz/docs/-4945840>

Kasb-hunar maktablarida ustuvor yo'nalish sifatida oilaviy biznes, tomorqa biznesi, qurilish, xizmat ko'rsatish, chorvachilik, parrandachilik, asalarichilik, baliqchilik kabi iqtisodiyotimizda muhim o'rin egallagan 200 dan ortiq ishchi kasblar bo'yicha kadrlar yetishtirildi. Kambag'allikka qarshi kurash borasida, avvalo, ijtimoiy himoyaga muxtoj oilalar farzandlarida tadbirkorlikka va biznesga oid bilim, malaka, ko'nikmalar rivojlantiriladi. 2-toifa – kollejlarda ta'limning xalqaro standart tasniflagichining 4-darajasiga mos keluvchi, kasblarning murakkablik darajasidan kelib chiqib, 2 yilgacha bo'lgan muddatlar davomida o'qitishga mo'ljallangan ta'lim dasturlari asosida o'rta professional ta'lim mutaxassisleri tayyorlanadi. Vazirliklar, idoralar va tashkilotlar tasarrufida faoliyat ko'rsatadigan va shu sohadagi aniq ish o'rnini uchun mutaxassislar tayyorlaydigan ushbu kollejlarga maktablarning 11-sinf bitiruvchilari qabul qilinadi. Kollejlarda Germaniya tajribasida yaxshi samara bergan "dual" ta'lim prinsiplari joriy etiladi: o'quvchilar haftaning ma'lum kunlarida kolleжда nazariy bilim oladi, boshqa kunlari korxonaning o'zida biriktirilgan usta rahbarligida to'g'ridan-to'g'ri kelajakda ishlaydigan ish o'rnida amaliyot o'taydi. 3-toifa – texnikumlarda ta'limning xalqaro standart tasniflagichining 5-darajasiga mos keluvchi, bakalavriat ta'lim yo'nalishlari bilan integratsiyalashgan, kunduzgi, kechki va sirtqi ta'lim shakllarida kamida 2 yil muddatga mo'ljallangan ta'lim dasturlari asosida 11-sinfni tugatgan yoshlar o'qitiladi. 2 yillik tahsildan so'ng bitiruvchilar oliy ta'lim muassasasida o'qigan kasbi bo'yicha suhbat asosida o'qishga qabul qilinishi mumkin. Bu tizim oliy ma'lumot olish istagida yurgan ko'plab maktab bitiruvchilarini oliy ta'lim bilan qamrab olish darajasini yaqin yillarda 50-60 foizga yetkazish uchun xizmat qiladi.

Professional ta'limning yangi tarmog'ida faoliyat olib borayotgan direktorlar, direktor o'rinbosarlari, o'qituvchi pedagoglar, ishlab chiqarish ustalarini saralash, tanlash, tayinlash, qayta tayyorlash va attestatsiyadan o'tkazish, ularning maqomini belgilash va mehnatini rag'batlantirishning yangi tartiblari ishlab chiqiladi. Professional ta'lim jarayoniga keyingi yillarda milliy iqtisodiyotni diversifikatsiya qilishda Respublikada ishga tushirilgan innovatsion ishlab chiqarish quvvatlari, sanoat, ishlab chiqarish, agrar sohalaridagi yirik korxonalar, innovatsion biznes va tadbirkorlik sub'yektlari, AKT, turizm va xizmat ko'rsatish tarmoqlarida zamonaviy texnologik tarmoqlarini boshqarishda ko'p yillik tajribaga ega bo'lgan mutaxassislar, ish yurituvchilar, injener-texnologlar, agronomlar va masterlar jalb qilindi. Shu vazifalarning bosqichma-bosqich amalga bajarilishi esa iqtisodiyotni yanada taraqqiy ettirish, kambag'allikni qisqartirish, yoshlar va xotin-qizlarning hayotda muhim o'rin topishi, xalqimiz turmushining yaxshi tomonga o'zgartirish masalalarining ijobiy hal etilishini ta'minlaydi.

Foydalanilgan adabiyotlar ro'yxati:

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*Raxmonov F.A.
Jizzax politexnika institute kata o'qituvchisi*

MIKRONEYRDA PAXTA TOLASINING PISHGANLIGINI VA INGICHKALIGINI ANIQLASH USULLARI

Annotatsiya: ushbu maqolada paxta tolasining pishganligini va ingichkaligini aniqlash laboratoriya asbobi - mikroneyr bilan ishlash hamda olingan ko'rsatkichlar asosida paxta tolasining pishganligi va ingichkaligi natijalari taxlil qilingan.

Kalit so'zlari: mikroneyr, paxta tolasini, porshenli stabilizatsiya, kompressor, ishchi kamera, kalibrovka, plunjer, elektron tarozi, mikroneyr, chiziqli zichligi.

*Rakhmanov F.A.
teacher
Jizzakh Polytechnic Institute*

METHODS OF DETERMINING COTTON FIBER RIPENESS AND THINNESS IN MICROWAVE

Abstract: this article analyzes the results of cotton fiber ripeness and thinness based on working with a laboratory instrument for determining the ripeness and thinness of cotton fiber - micronaire.

Key words: microwire, cotton fiber, piston stabilization, compressor, working chamber, calibration, plunger, electronic scale, microwire, linear density.

Mikroneyr - bu paxta tolasining pishganligini va ingichkaligini aniqlash laboratoriya asbobidir.

Mikroneyrning 2 xili mavjud: statsionar va ko'chirma. Ko'chirma mikroneyrlar klassterlar bilan faqat paxta zavodlarida ishlatiladi. Tarozili va tarozisiz ko'chirma mikroneyrlar mavjud. Mikroneyr o'z ichiga: elektr kompressor, porshenli havo kamerasi, tarozi, mikroneyr ko'rsatkich shkalasi, ishchi kamera, 8 gr tosh va kalibr shaybasi (6,5-0 mic ko'rsatkichi bilan)ni oladi. Ish uchun kalibr tolasini kerak.

Elektr kompressor- mikroneyr tizimiga havo berish uchun xizmat qiladi. Porshenli stabilizatsiya havo kamerasi - mikroneyr tizimida bosimni teng taqsimlash uchun kerak. Tarozili - ma'lum miqdorda paxta tolasini olchash uchun (8 gr) xizmat qiladi.

Mikroneyr ko'rsatkich shkalasi - mikroneyr ko'rsatkichini aniqlash uchun xizmat qiladi, mikroneyr ko'rsatkichi bosim shkalasi dan va ko'rsatish strelkasidan iborat. Ishchi kamerasi - temirli stakan va richag orqali

harakatlanuvchi plunjerdan iborat 8 kg tosh - tarozining kalibrovkasi uchun xizmat qiladi.

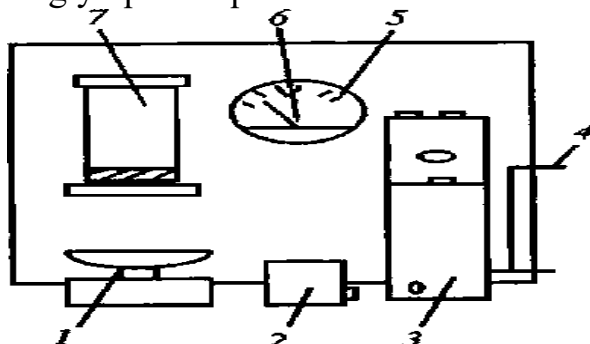
Kalibrovkali shayba - yuqori va pastki mikroneyr ko'rsatkichi-ning (6,5-0 mic) kalibrovkasi uchun xizmat qiladi, u temir metall bochkasi va klapandan iborat. Kalibrovkali tola - bular mikroneyrdan o'z ko'rsatkichiga xos bo'lib, ular AQSH ning qishloq xo'jaligi vazirligi etalon laboratoriyasida standartlar bo'yicha yaratilgandir.

Mikroneyrning ishlashi.

Ishni boshlashdan oldin - elektr kompressor elektr tarmoqqa (220 volt) ulanadi. Kompressordan havo rezinali shlangdan havo kamerasiga ko'tariladi, so'ng porshen kameraning eng yuqori nuqtasiga kotariladi (1- rasm).

Mikroneyrni ishga tayyorlash.

Birinchi navbatda tarozining kalibrovkasi qilinadi. Buning uchun mikroneyr ko'rsatkich shkalasida romb shaklida bolinma bor. Taroziga tosh (8 gr) qo'yiladi, ammo ko'rsatkichning strelkasi rombning o'rtasida turishi kerak, buni tarozi va havo kamerasining orasidagi uzatma vint bilan to'g'rilanadi. Tarozining kalibrovkasidan so'ng yuqori va pastki mikroneyr ko'rsatkichining kalibrovkasiga o'tiladi. Ishchi kamerasiga kalibrovkali shaybani joylashtiriladi, plunjemi ko'tarib (richagni tushirib), ishchi kameraning tepasida joylashgan o'ng vint bilan mikroneyming yuqori nuqtasi kalibrlanadi.



1-rasm. Mikroneyr chizmasi:

1 - tarozi; 2 - mikroprotessor; 3 - kamera; 4 - richag; 5- shkala;
6 - strelka; 7- vakuum-klapan.

So'ng klapan yordamida ishchi kamerasidan havo chiqariladi va mikroneyming nol ko'rsatkichi kalibrlanadi. Bundan keyin plunjerni tushirib (richagni ko'tarib), kalibrovkali shaybani chiqariladi.

Mikroneyrni aniq kalibrovka qilish uchun kalibrovkali toladan foydalaniladi. Kalibrovkali tola paxtaning navi bo'yicha aniq bolinmaydi, ammo mikroneyrni past ko'rsatkichi bilan kalibrovkali tola paxtaning past navlari uchun, yuqori ko'rsatkichi bilan kalibrovkali tola paxtaning yuqori navlari uchun ishlatiladi.

Mikroneyrning ko'rsatkichlarida kalibrovkali tola 2,1 mic.dan 6,0 mic.gacha boiadi. Kalibrovka uchun mikroneyr tarozida yoki elektron tarozida, 8 gr kalibrovkali tolani olchab va keyin ishchi kamerasiga joylashtiriladi, so'ng

ishchi kamerasing qopqogi yopilib va plunjer ishlash holatiga ko'tariladi (richagni tushirib).

Paxta tolasining mikroneyrini aniqlash uchun o'rtacha namuna olinadi, tarozida 8 gramm paxta tolasi tortilib ishchi kamerasing solinadi. Ishchi kamerasing qopqogi yopilib, plunjerni ishchi holatiga keltiriladi va mikroneyr ko'rsatkichi shkalasi bo'yicha yoziladi. So'ng plunjer tushiriladi, ishchi kamerasing qopqogi ochiladi va paxta tolasining namunasi olinadi.

Paxta tolasining partiyasidan 10% namunasi mikroneyr ko'rsatkichi yoziladi. Sinash usullarini nazorat qilish uchun maxsus tartibda tasdiqlangan paxta tolasining standart (etalon) namunalari qolaniladi.

Namunalarni sinashdan avval iqlim sharoitida, harakatdagi havo oqimi ostida kamida 4 soat yoki harakatsiz havo oqimi ostida 12 soat davomida yoki namuna vaznining o'zgarishi 2 soat davomida 0,25 foizdan oshmagan hollarda undan kam vaqt davomida ushlab turiladi.

Mikroneyr ko'rsatkichini aniqlash uchun LPS-4 qurilmasi qolanilganda sinash uchun namuna massasi $9,0 \pm 0,02$ g. Sinash uchun namuna kichik-kichik qismlarda qurilmaning kamerasing tolalarning to'p- to'p bolib yigilib qolishiga yoi qo'yilmaydigan qilib joylashtiriladi. Zichlashgan va yigilib qolgan tolalar albatta qo'l bilan titiladi. Namuna orqali qurilmaning konstruksiyasiga bogliq boigan malum bosim (yoki oqim) ostida havo oqimi yuboriladi. Asbob shkalasi bo'yicha hisob ± 1 foiz aniqlikda bajariladi.

Mikroneyr va LPS-4 asboblarida mikroneyr ko'rsatkichini aniqlash uchun ishlatilayotgan namuna sinash oldidan paxta analizatoridan o'tkazilmaydi.

Olchashlarning natijalarini hisoblash.

Mikroneyr ko'rsatkichini havo o'tkazuvchanlik bo'yicha aniqlash usuli. Mikroneyr kattaligida graduировка qilingan shkalali asboblarda sinaladigan namuna uchun o'rtacha qiymat dastlabki ikkinchi o'nlik belgisigacha aniqlikda hisoblanadi.

Natija 0,2 dan oshib ketsa sinashlar qaytariladi. Agar shunda ham qiymatlar meyorlardan ohsa, hamma sinalgan namunalar bo'yicha o'rtacha arifmetik qiymati hisoblanadi.

Boshqa kattaliklarda graduировка qilingan shkalali asboblar nisbatlar yoki jadvallar yordamida ko'rsatkichlar to'gridan-to'gri mikroneyr kattaligiga aylantiriladi.

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*Raxmonov F.A.
Jizzax Politehnika instituti*

PIVOLARNING SIFAT EKSPERTIZASI. PIVOLARNING SIFATINI ORGANOLEPTIK KO'RSATKICHLARI ASOSIDA BAHOLASH

Annotatsiya: ushbu maqolada pivoning organoleptik ko'rsatkichlari bo'lgan tiniqligi, ta'mi, xmel achchiqligi, aromati va ko'piklanishi xususiyatlarini e'tiborga olgan holda ushbu ko'rsatkichlar asosida pivoning iste'mol xossalarini baholashning asosiy mezonlari tahlil qiingan.

Kalit so'zlari: davlatlararo standart, organoleptik ko'rsatkichlar, achchiqlik, harorat, sifati, maxsus solod, achchiq modda, ta'm.

*Rakhmanov F.A.
Jizzakh Polytechnic Institute*

QUALITY EXPERTISE OF BEERS. EVALUATION OF THE QUALITY OF BEERS BASED ON ORGANOLEPTIC INDICATORS

Abstract: this article analyzes the main criteria for evaluating the consumption properties of beer based on these parameters, taking into account the organoleptic indicators of beer: clarity, taste, hop bitterness, aroma and foaming.

Key words: international standard, organoleptic indicators, bitterness, temperature, quality, special malt, bitter substance, taste.

Pivolarning sifati GOST 31711-2012 davlatlararo standarti talablariga javob berishi kerak. Mazkur standart standartlashtirish, metrologiya va sertifikatlashtirish bo'yicha davlatlararo kengashi tomonidan 2012 yil 15 noyabrda 42-sonli bayonnomasi bilan kuchga kiritilgan.

Mazkur standart bo'yicha pivo oqish va qo'ng'ir pivo turlariga bo'linadi. Ishlov berish usuli bo'yicha pasterizatsiya qilinmagan, pasterizatsiya qilingan, filtrlangan, filtrlanmagan turlarga bo'linadi.

Piva suslasida (atalasida) dastlabki quruq moddaning massa hissasiga qarab pivolar quyidagi guruhlarga bo'linadi: 8,10,11,12,13,14,15,16,17,18,20 foizli tiniq pivolar va 12,13,14,15,16,17,18,20,21 foizli qora qo'ng'ir rangli pivolar.

Pivolarning sifati baholashda uning organoleptik ko'rsatkichlari juda muhim hisoblanadi. Pivoning organoleptik ko'rsatkichlariga quyidagilar kiradi: tiniqligi, ta'mi, xmel achchiqligi, aromati va ko'piklanishi. Bu ko'rsatkichlar pivoning har bir turi uchun individual hisoblanadi va iste'mol xossalarini baholashda asosiy mezon hisoblanadi. Pivoning hamma organoleptik ko'rsatkichlari degustatsiya jarayonida aniqlanadi. Hozirgi kunda iste'molchi pivoning rangiga va tiniqligiga qarab pivoga baho berishini hisobga olib, ana shu

ko'rsatkichlariga e'tibor qaratiladi. Pivolarning rangi –har bir turi uchun farq qiluvchi belgi hisoblanadi. Tiniq pivolar toza, tiniq, tillasimon-qo'ng'ir rangga ega bo'lishi kerak.

Qora-qo'ng'ir pivolarga rangi bo'yicha tiniq pivolar singari qat'iy talab qo'yilmaydi.

Butilikalarga quyilgan pivolarning rangi deyarlik o'zgarmaydi. Butilikalarga quyilgan tiniq pivolarga quyosh nuri to'g'ridan-to'g'ri tushib tursa ularning rangi o'zgaradi va turli xil kimyoviy o'zgarishlar ro'y berib, natijada oziqaviy qiymati va iste'mol xossalari pasayadi.

Tiniq pivolar, o'ziga xos rangga ega bo'lish bilan bir qatorda tiniq bo'lishi kerak. Uning tiniqligini pivolarni maxsus bokalga quyib, taralib tushayotgan quyosh nuriga qarab aniqlanadi. "Pivoni ko'z bilan ichadilar" degan fikrlar mavjud, shu sababli pivoning tiniqligi iste'molchi yuqori baholaydigan eng muhim ko'rsatkichlardan biri hisoblanadi. Lekin shuni ham qayd etish lozimki pivoning tiniqligi qancha yuqori bo'lsa, unda shuncha darajada ta'mini va ko'pik hosil qilish xususiyatini ta'minlaydigan kolloid moddalar shuncha darajada kam bo'ladi.

Pivoning ta'mi, aromati, xmelga xos yoqimli achchiqligi uni biroz xo'plab ichib aniqlanadi. Bu yerda birinchi navbatta uning ta'mi, aromati, xmelga xos yoqimli achchiq ta'miga e'tibor beriladi va ikkinchidan pivoda qanday ta'mlar va hidlar mavjudligini bilish ham juda muhim hisoblanadi. Pivolarning ta'mi va hidi toza, to'liq, garmonik, yaqqol seziluvchan xmelga xos achchiqlik va aromatga ega, begona ta'mlarsiz va hidlarsiz bo'lishi kerak.

Pivolarning ta'mining sezilish darajasiga harorat ham ma'lum darajada ta'sir ko'rsatadi. Haroratning oshishi bilan pivoning kolloid sistemasining xossalari ham o'zgaradi, bu esa o'z navbatida ta'm ko'rsatkichlariga ta'sir ko'rsatadi. Agar degustatsiya qilinayotgan pivoning harorati juda past bo'lsa ta'mi oddiy, kam seziluvchan bo'ladi, agar juda yuqori bo'lsa yoqimsiz seziladi. Shu sababli iste'molchiga berilayotgan pivoning harorati 8-12⁰S bo'lishi maqsadga muvofiq hisoblanadi.

Qora-qo'ng'ir rangli pivolarda esa ishlab chiqarish uchun foydalanilgan maxsus solodlarning(qora, karamelizatsiyalangan) ta'mi yaqqol sezilib turishi kerak. Bunday pivolarning ta'm ko'rsatkichlari xom ashyo tarkibi va texnologik jarayonlarga bog'liq bo'ladi. Begona ta'mlar, yoqimsiz achchiq ta'm, yuqori nordonlik va SO₂ gazi bilan yetarli darajada to'yinmaganlik pivolarning ta'm ko'rsatkichlarini keskin darajada pasaytiradi.

Tiniq pivo navlarida mayin xmel achchiqligi sezilib turadi, lekin juda o'tkir, yoqimsiz achchiq ta'm bo'lmasligi kerak. Bu ta'm tiniq pivolarni ichgandan keyin darhol tarqalib ketishi kerak.

Qo'ng'ir-qora pivolar tiniq pivolarga qaraganda shirinroq. Ichgandan keyin tilda qora solodning ta'mi qoladi, xmelning achchiqroq ta'mi esa deyarlik sezilmaydi.

Bunda eng muhim ta'm komponenti bo'lib etil spirti hisoblanadi, u ko'pchilik ta'm va aromat beruvchi moddalarning ta'sirini ko'chaytiradi. Bunday pivolarning ta'mi va hididagi farq yuqori spirtlar, xmel efir moylari, achishda hosil bo'lgan boshqa moddalarning borligi bilan tushuntiriladi.

Pivoning achchiqroq ta'mi xmelning achchiq va oshlovchi moddalariga, arpa va solod po'stlog'i achchiq moddasiga, achitqilarning ajratib chiqarayotgan moddalariga bog'liq bo'ladi.

Yaxshi pivolar bir butun birlashgan garmonik ta'm va hidga ega bo'lishi kerak.

Pivolarning sifatini organoleptik baholashning haqiqiylikini oshirish uchun 25-balli sistemadan ham foydalaniladi. Bunda pivoning organoleptik ko'rsatkichlari bo'yicha ballar quyidagicha taqsimlanadi.

Tiniqligi - 3 ball

Rangi - 3 ball

Ta'mi - 5 ball

Xmel achchiqligi - 5 ball

Hidi - 4 ball

Ko'pirishi - 5 ball

Jami 25 ball

Agar pivo degustatsiya natijasi bo'yicha 22-25 ball olsa a'lo, 19-21 ball olsa yaxshi, 13-18 ball olsa esa qoniqarli sifatga ega deb topiladi. Agar pivo 12 va undan kam ball bilan baholansa, bunday pivolar qoniqarsiz sifatga ega bo'lgan pivolar deb baholanadi va sotishga ruxsat etilmaydi.

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Razzakova O.B.
2nd year master's student
botany direction
Andijan State University

SEVERAL PREVALENT ESSENTIAL OIL PLANTS FOUND IN THE KYRTASHTAU REGION, ALONG WITH THEIR DISTINCTIVE BIOMORPHOLOGICAL CHARACTERISTICS

Abstract. This article reviews several key essential oil plants commonly found in the territory of Kyrkashtau, focusing on their unique biomorphological features. Through field surveys and detailed morphological analyses, the research identifies and describes the botanical traits of these plants. The species examined include *Torilis arvensis*, *Mentha longifolia* var. *asiatica*, *Prangos pabularia*, *Marrubium anisodon*, and *Artemisia rutifolia*. Understanding the biomorphological characteristics of these plants is crucial for their accurate identification, conservation, and sustainable utilization in various industries. This study contributes valuable insights into the botanical richness of Kyrkashtau and underscores the significance of these essential oil plants for both ecological conservation and economic development.

Key words: essential oil plants, *torilis arvensis*, *mentha longifolia*, *prangos pabularia*, *marrubium anisodon*, *artemisia rutifolia*.

Kyrkashtau, a region known for its diverse and unique flora, encompasses a variety of essential oil plants that contribute significantly to the local ecosystem and various industries. Essential oils extracted from these plants are valued for their aromatic properties and have applications in cosmetics, pharmaceuticals, and traditional medicine. This study focuses on elucidating the biomorphological features of key essential oil plants found in Kyrkashtau (Imom ota), Uzbekistan, providing insights into their botanical characteristics and ecological roles. Understanding these features is crucial for plant identification, conservation efforts, and sustainable utilization of natural resources. The selected essential oil plants, including *Torilis arvensis*, *Mentha longifolia* var. *asiatica*, *Prangos pabularia*, *Marrubium anisodon*, and *Artemisia rutifolia*, represent a cross-section of the region's botanical richness. Each species exhibits unique traits that make them distinct contributors to the essential oil industry and local biodiversity. Through field surveys and detailed morphological analyses, this research aims to document and describe the key biomorphological characteristics of these plants. This knowledge not only enhances our understanding of the flora of Kyrkashtau but also underscores the importance of sustainable resource management and conservation practices. By exploring the biomorphology of essential oil plants in Kyrkashtau, this study seeks to contribute valuable insights to botanical research, conservation efforts, and economic development initiatives centered around

natural resources. The findings of this study will provide a foundation for further exploration into the chemical composition and potential applications of essential oils derived from these plants. In summary, the study of essential oil plants in Kyratashtau offers a window into the region's botanical diversity and highlights the ecological and economic significance of these plants. This research is pivotal for promoting sustainable practices that support both biodiversity conservation and local livelihoods.

***Torilis arvensis* (Huds.) Link**

Biomorphological Features: *Torilis arvensis*, commonly known as spreading hedge-parsley, is a herbaceous annual plant characterized by its slender, branching stems and finely divided leaves. The leaves are pinnate with narrow, toothed leaflets. Small white flowers form in umbels at the tips of the branches, giving way to fruits with hooked spines. The native range of this species is Europe to Central Asia and Pakistan, Macaronesia, N. Africa to Arabian Peninsula. It is an annual and grows primarily in the temperate biome. [1]

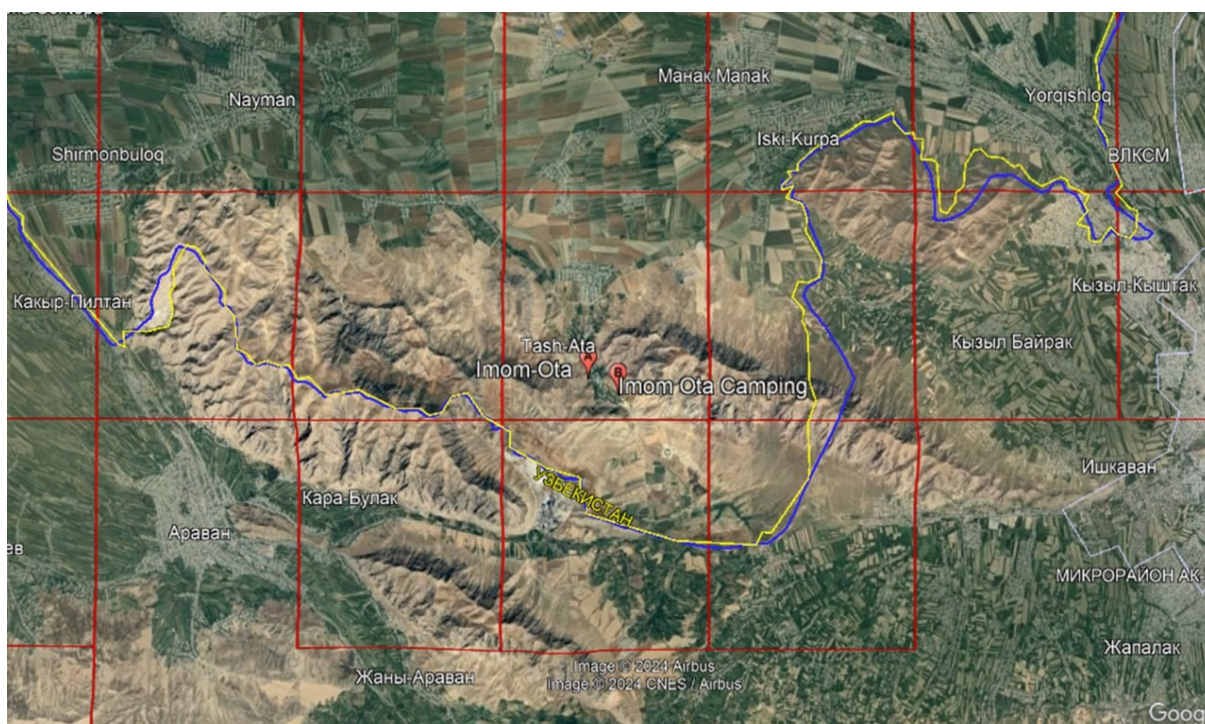


Fig. 1. *Torilis arvensis* is native to Central Asia, including Kyratashtau [2]

***Mentha longifolia* var. *asiatica* (Boriss) Rech. f.**

Biomorphological Features: *Mentha longifolia* var. *asiatica*, a variety of wild mint, is a perennial herb with elongated lanceolate leaves and a strong minty aroma. It produces dense spikes of small lilac-colored flowers. The stems are square-shaped, a characteristic feature of the mint family (*Lamiaceae*). The native range of this variety is W. Asia to W. China. It is a perennial and grows primarily in the temperate biome. First published in Fl. Iranica 150: 559 (1982)

***Prangos pabularia* Lindl.**

Biomorphological Features: *Prangos pabularia*, a member of the *Apiaceae* family, is a tall perennial herb with compound umbels of small white flowers. The plant features finely divided, aromatic leaves and a robust taproot. Its fruits are oval-shaped and ribbed. The native range of this species is Afghanistan to Central Asia and W. Himalaya. It is a perennial and grows primarily in the temperate biome.

***Marrubium anisodon* Koch**

Biomorphological Features: *Marrubium anisodon*, also known as horehound, is a perennial herb with woolly leaves and square stems. The leaves are wrinkled and emit a strong, pleasant aroma. Clusters of small white flowers are densely packed in whorls around the stem. The native range of this species is Central Albania to Central Asia and W. Himalaya. It is a perennial and grows primarily in the temperate biome. First published in *Linnaea* 21: 696 (1849) Native to: Afghanistan, Albania, Greece, Iran, Kazakhstan, Kirgizstan, Krym, Pakistan, Tadzhikistan, Transcaucasus, Turkey, Turkmenistan, Uzbekistan, West Himalaya [3]

***Artemisia rutifolia* Steph. ex Spreng. [4]**

Biomorphological Features: *Artemisia rutifolia*, a species of sagebrush, is a shrub characterized by its silvery-gray foliage and aromatic scent. The leaves are deeply lobed or divided into linear segments. This name is reported by *Asteraceae* as an accepted name in the genus *Artemisia* (family *Asteraceae*). [5] The record derives from TICA (data supplied on 2023-11-28) which reports it as an accepted name Yellowish flower heads are borne in clusters along the branches. First published in *Syst. Veg.*, ed. 16. 3: 488 (1826)



Pic. 2. *Artemisia rutifolia* Steph. ex Spreng [6]

The native range of this species is Uzbekistan, Afghanistan to S. Siberia and Himalaya. It is a perennial or subshrub and grows primarily in the temperate biome. These essential oil plants play significant roles in the local ecosystem and have traditional uses in herbal medicine and culinary practices. The biomorphological descriptions provided here serve as foundational knowledge for identifying and studying these plant species in Kyrntashtau. Further research on the chemical composition of their essential oils and their ecological interactions would contribute to a comprehensive understanding of their importance and potential applications.

Conclusion The study of essential oil plants in Kyrntashtau highlights the importance of biodiversity conservation and sustainable resource management. By leveraging the biomorphological knowledge presented here, stakeholders can make informed decisions to harness the benefits of these natural assets while ensuring their long-term preservation for future generations. The essential oil plants identified in the territory of Kyrntashtau exhibit diverse biomorphological characteristics that contribute to their ecological significance and economic potential. Through this study, we have highlighted five key plant species—*Torilis arvensis*, *Mentha longifolia* var. *asiatica*, *Prangos pabularia*, *Marrubium anisodon*, and *Artemisia rutifolia*—each possessing unique traits that make them valuable contributors to the essential oil industry and local biodiversity. Understanding the distinct attributes of each species facilitates their sustainable utilization for essential oil extraction, herbal medicine, and other commercial applications. Furthermore, the presence of these essential oil plants underscores the ecological resilience and adaptability of Kyrntashtau's flora to its specific environmental conditions. Conserving and promoting the cultivation of these plants not only preserves biodiversity but also supports local livelihoods and promotes sustainable practices in the region.

In conclusion, the study underscores the importance of botanical research and conservation in Kyrntashtau, emphasizing the need for sustainable practices that balance economic development with environmental stewardship. By continuing to explore and protect the unique flora of this region, we can ensure its preservation for future generations while unlocking the full potential of its natural resources.

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Razzakova O.B.
2nd year master's student
botany direction
Andijan State University

SOME ESSENTIAL OIL PLANTS COMMON IN THE TERRITORY OF KYRTASHTAU, AND THEIR BIOMORPHOLOGICAL FEATURES

Abstract. This article reviews the essential oil plants prevalent in the Kyrtaştau region, detailing their biomorphological characteristics. The study identifies key species and elucidates their morphological traits, focusing on plants known for their essential oil production. Through field surveys and morphological analyses, this research aims to contribute valuable insights into the diverse flora of Kyrtaştau, emphasizing the significance of these plants for essential oil extraction and potential applications in various industries. The findings highlight the unique biomorphological features of select plant species, offering a comprehensive overview essential for conservation, cultivation, and utilization of these valuable botanical resources.

Key words: Uzbekistan, Kyrtaştau, plants, territory, species, essential oil, grows.

The territory of Kyrtaştau boasts a rich diversity of flora, including numerous plant species renowned for their production of essential oils. Essential oils are valued for their aromatic properties and have a wide range of applications in industries such as cosmetics, pharmaceuticals, and aromatherapy. Understanding the biomorphological features of these essential oil plants is crucial for their identification, cultivation, and sustainable utilization. This study focuses on identifying and characterizing the essential oil plants that are prevalent in the Kyrtaştau region, located in Uzbekistan. By examining the biomorphological traits of these plants, including their growth habits, leaf morphology, flower structure, and other botanical features, we aim to provide a comprehensive overview of the diverse plant species contributing to the essential oil industry in this region. The research combines field surveys with detailed morphological analyses to elucidate the unique characteristics of each identified species. This knowledge is essential for effective plant conservation, cultivation, and optimization of essential oil extraction methods. Furthermore, understanding the biomorphological features of these plants enhances our appreciation of their ecological roles and potential economic contributions to local communities. Through this exploration of essential oil plants in Kyrtaştau, we seek to contribute valuable insights into the botanical richness of the region and promote sustainable practices for harnessing the benefits of these natural resources.

The territory of Kyrtaştau, located in Uzbekistan, harbors a diverse array of plant species known for their production of essential oils. Understanding the

biomorphological characteristics of these plants is essential for their identification, conservation, and sustainable utilization. Here, we highlight five prominent essential oil plants found in Kyrntashtau and describe their key biomorphological features based on field observations and botanical analyses.

***Torilis arvensis* (Huds.) Link**

Biomorphological Features: *Torilis arvensis*, commonly known as spreading hedge-parsley, is a herbaceous annual plant characterized by its slender, branching stems and finely divided leaves. The leaves are pinnate with narrow, toothed leaflets. Small white flowers form in umbels at the tips of the branches, giving way to fruits with hooked spines. The native range of this species is Europe to Central Asia and Pakistan, Macaronesia, N. Africa to Arabian Peninsula. It is an annual and grows primarily in the temperate biome. [1]



Fig. 1. *Torilis arvensis* is native to Central Asia, including Kyrntashtau [2]

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Biomorphological Features: *Mentha longifolia* var. *asiatica*, a variety of wild mint, is a perennial herb with elongated lanceolate leaves and a strong minty aroma. It produces dense spikes of small lilac-colored flowers. The stems are square-shaped, a characteristic feature of the mint family (*Lamiaceae*). The native range of this variety is W. Asia to W. China. It is a perennial and grows primarily in the temperate biome. First published in Fl. Iranica 150: 559 (1982)

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Pic. 2. Prangos pabularia Lindl. [3]

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***Marrubium anisodon* Koch**

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***Artemisia rutifolia* Steph. ex Spreng. [5]**

Biomorphological Features: *Artemisia rutifolia*, a species of sagebrush, is a shrub characterized by its silvery-gray foliage and aromatic scent. The leaves are deeply lobed or divided into linear segments. This name is reported by *Asteraceae* as an accepted name in the genus *Artemisia* (family *Asteraceae*). [6] The record derives from TICA (data supplied on 2023-11-28) which reports it as an accepted name Yellowish flower heads are borne in clusters along the branches. First published in *Syst. Veg.*, ed. 16. 3: 488 (1826) The native range of this species is Uzbekistan, Afghanistan to S. Siberia and Himalaya. It is a perennial or subshrub and grows primarily in the temperate biome.

These essential oil plants play significant roles in the local ecosystem and have traditional uses in herbal medicine and culinary practices. The biomorphological descriptions provided here serve as foundational knowledge for identifying and studying these plant species in Kyrtashtau. Further research on the

chemical composition of their essential oils and their ecological interactions would contribute to a comprehensive understanding of their importance and potential applications.

Conclusion The essential oil plants identified in the territory of Kyrtaştau exhibit diverse biomorphological characteristics that contribute to their ecological significance and economic potential. Through this study, we have highlighted five key plant species—*Torilis arvensis*, *Mentha longifolia* var. *asiatica*, *Prangos pabularia*, *Marrubium anisodon*, and *Artemisia rutifolia*—each possessing unique traits that make them valuable contributors to the essential oil industry and local biodiversity. The biomorphological features described, including leaf morphology, flower structure, growth habits, and aromatic properties, serve as essential tools for the accurate identification and conservation of these plants. Understanding the distinct attributes of each species facilitates their sustainable utilization for essential oil extraction, herbal medicine, and other commercial applications. Furthermore, the presence of these essential oil plants underscores the ecological resilience and adaptability of Kyrtaştau's flora to its specific environmental conditions. Conserving and promoting the cultivation of these plants not only preserves biodiversity but also supports local livelihoods and promotes sustainable practices in the region. Future research directions may include comprehensive chemical analyses of the essential oils derived from these plants, exploring their pharmacological properties, and investigating their interactions within the local ecosystem. Such endeavors would contribute to a deeper understanding of the botanical resources in Kyrtaştau and their potential contributions to various industries and scientific fields.

In conclusion, the study of essential oil plants in Kyrtaştau highlights the importance of biodiversity conservation and sustainable resource management. By leveraging the biomorphological knowledge presented here, stakeholders can make informed decisions to harness the benefits of these natural assets while ensuring their long-term preservation for future generations.

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*Ro'yiddinova M.A.
Qarshi davlat universiteti talabasi*

QASHQADARYO VILOYATIDA OZIQ-OVQAT XAVFSIZLIGINI TA'MINLASHDA CHORVACHILIK TARMOG'INI O'RNI

Annotatsiya. Mazkur maqolada O'zbekistonda chorvachilikka e'tibor, uning istiqbollari, Qashqadaryo vohasining iqtisodiy hayotida chorvachilikning o'rni, davlat tomonidan chorvachilik sohasida amalga oshirilgan islohotlar, oziq-ovqat xavfsizligini ta'minlashda chorvachilikning o'rni haqida bayon qilingan.

Kalit so'zlar: Qashqadaryo, chorvachilik, qoramolchilik, qo'ychilik, xo'jalik.

*Royiddinova M.A.
student
Karshi State University*

ROLE OF LIVESTOCK NETWORK IN ENSURING FOOD SECURITY IN KASHKADARYA REGION

Abstract. This article describes the attention to cattle breeding in Uzbekistan, its prospects, the role of cattle breeding in the economic life of the Kashkadarya oasis, the reforms implemented by the state in the field of cattle breeding, the role of cattle breeding in ensuring food security.

Key words: Kashkadarya, cattle breeding, cattle breeding, sheep breeding, economy.

Oziq-ovqat xavfsizligi butun dunyo mamlakatlari oldida turgan eng dolzarb vazifalardan biridir. BMT ham bugungi kunda oziq-ovqat mahsulotlarini yetishtirish va ularni taqsimlash bo'yicha yondashuvni mutlaqo o'zgartirish vaqti kelganini ta'kidlamogda. Zero, ideal holatda qishloq, o'rmon va baliqchilik xo'jaliklari barchani oziq-ovqat bilan to'liq ta'minlash va odamlar uchun risoladagidek daromad manbaini yaratib berishga qodir. Bunday holatda inson manfaatlari yo'lida ham qishloq xo'jaligi rivojlanadi, ham atrof muhitni muhofaza qilish bo'yicha chora-tadbirlar ijrosi ta'minlanadi.

O'zbekiston Respublikasi Prezidentining 2019 yil 28 martda "O'zbekistonda veterinariya va chorvachilikni rivojlantirish davlat qo'mitasi faoliyatini tashkil etish to'g'risida"gi qarori bilan viloyatimizning har bir tumanida kamida ikkitadan qora mol bo'rdoqchilik va sutchilik yo'nalishlarida chorvachilik komplekslari tashkil etish maqsadida loyihalar ishlab chiqilmoqda.

Bugungi kunda tabiatga befarq munosabat, unga antropogen ta'sirning kuchayib borishi, isrofgarchilik, ilg'or va rivojlanayotgan davlatlar o'rtasidagi oziq-ovqat balansi bo'yicha farqning o'sayotgani, iqlim o'zgarishlari qator salbiy

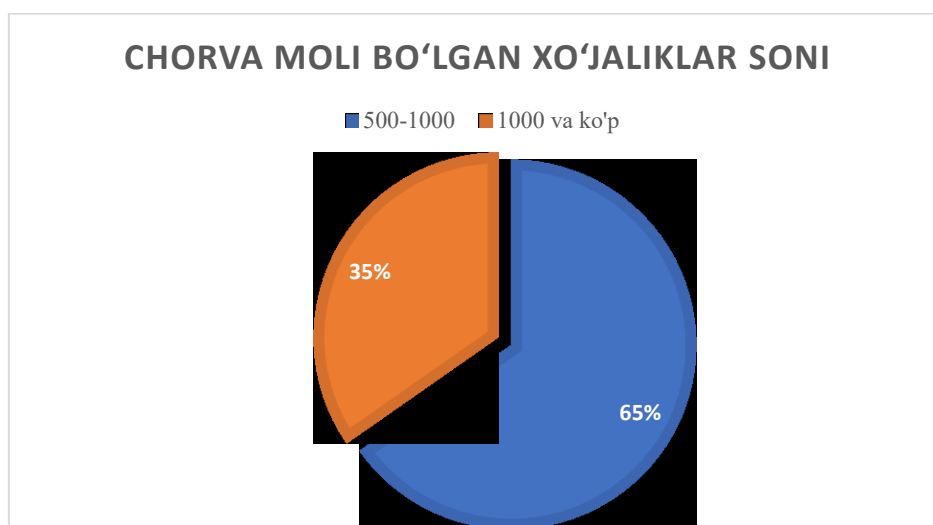
omillarni keltirib chiqardi. Noz-ne'matlarimiz, chuchuk suv, ummonlar, o'rmonlar, biologik xilma-xillik keskin sur'atlarda kamayib bormoqda, yer unumdorligi pasayib, tuproq degradatsiyaga uchramoqda. Qishloq xo'jaligining barcha sohasi uchun tuproq unumdorligi asosiy o'rinlarda turadi.

Oziq-ovqat xavfsizligini hal etishda bir qator qiyinchiliklar mavjudligiga qaramay, mamlakatimizda qishloq xo'jaligi mahsulotlari ishlab chiqarish hajmini ham miqdor, ham sifat jihatdan muntazam oshirib borish va shu orqali oziq-ovqat ta'minotini mustahkamlash borasida salmoqli natijalar qo'lga kiritilmoqda. Xususan, 2023 yilda belgilangan ko'rsatkichlarga erishish maqsadida 4 million gektar (+358 ming gektar), shundan 2,5 million gektar asosiy, 214 ming gektar bog'-tok qator orasi, 424 ming gektar lalmi va 903 ming gektar takroriy maydonlarda oziq-ovqat mahsulotlarini yetishtirish belgilangan. Mazkur maydonlardan 8,1 million tonna boshqli don, 528 ming tonna sholi, 579 ming tonna dukkakli, 345 ming tonna moyli o'simliklar, 12,2 million tn sabzavot, 2,5 million tonna poliz, 4,1 million tonna kartoshka, 3,1 million tonna meva va 2 million tn uzum yetishtirilishi prognoz qilindi.

Qashqadaryo viloyati qishloq xo'jaligi tarmog'i paxtachilik, donchilik, zabzavotchilik, donchilik, uzumchilik, bog'dorchilik bilan birga chorvachilikning asosiy ixtisoslashgan tarmoqlar zaminida tarkib topgan. Yer suv resurslaridan samarali foydalanish orqali qishloq xo'jaligini intensiv rivojlantirish uchun mo'ljallangan yirik masshtabli xaritalarni tuzishda asosiy e'tibor ushbu sohaning o'ziga xos mintaqaviy qaratilishi lozim.

Bugungi kunda respublikamizda jami 18 032 ta chorvachilik xo'jaliklari mavjud bo'lib, shundan 7 614 tasi qoramolchilik, 3 263 tasi qo'y va echkichilik, 142 tasi yilqichilik, 52 tasi tuyachilik, 1 163 tasi parrandachilik, 4 829 tasi baliqchilik, 715 tasi asalarichilik va 254 tasi quyunchilik yo'nalishida tashkil etilgan.

1-jadval



Aholi jon boshiga go'sht mahsulotlari ishlab chiqarish 47,5 kilogrammga (1 kishiga yillik me'yor — 46,1 kilogramm), sut mahsulotlarini ishlab chiqarish ko'rsatkichi 336 kilogrammga (1 kishiga yillik me'yor — 310,4 kilogramm) yetkazildi.[1]

2-jadval

O'zbekiston Respublikasida chorvachilik sohasi va uning tarmoqlarini rivojlantirish bo'yicha 2022 — 2026-yillarga mo'ljallangan dasturning maqsadli ko'rsatkichlari (indikatorlar)

T/r	Ko'rsatkichlar nomi	2021-yil	2022-yil	2024-yil	2026-yil
Chorvachilikda naslchilik va chorva mollari mahsulдорligini oshirish yo'nalishida					
1.	Umumiy qoramollar podasida sof zotli naslli qoramollarning ulushi (foiz)	9	11	16	33
2.	Umumiy qoramollar podasida zoti yaxshilangan mahalliy qoramollarning ulushi (foiz)	54	62	72	90
3.	Chorva hayvonlarini saqlash uchun kompyuterlashtirilgan dasturlardan foydalanuvchi chorvachilik xo'jaliklari sonini ko'paytirish (foiz)	20	25	30	50
4.	Milliy va xalqaro (Global GAP, NACCP va boshq.) standartlarga javob beradigan fermer xo'jaliklarining ulushi (foiz)	1	2	15	30
Qo'ychilik va echkichilik tarmog'ida					
5.	Go'sht-jun yo'nalishida naslli qo'y va echkilar ulushi (foiz)	15	20	25	35
6.	Qurg'oqchilikka chidamli bo'lgan yem-hashak o'simliklarini ekish bilan tog' va tog'oldi yaylovlarning hosildorligini oshirish (sentner/ga)	8	9	10	12
7.	Yaylovlarda tik quduqlar qazishga ruxsat berish (ming/ga)	—	200 ming ga	500 ming ga	800 ming ga

Yaylov yerlaridan maqsadli foydalanish orqali arzon ozuqa mahsulotlari yetishtiriladi hamda chorvachilik sohasida suv resurslari va energiya iste'moli tejamkorligiga erishiladi. Iqlim o'zgarishi, tabiatning biologik xilma-xilligini saqlash va cho'llanishga qarshi kurashish bo'yicha xalqaro jarayonlarni e'tiborga olgan holda chorvachilik sohasida amalga oshirilayotgan islohotlarni tabiiy resurslar barqarorligini va atrof-muhit muhofazasini ta'minlashga qaratish muhim hisoblanadi.

Qashqadaryo viloyatida zamonaviy chorvachilik komplekslarini tashkil etish bo'yicha qiymati 235,437 mlrd so'mlik 73 ta loyiha ishlab chiqildi. 2023-yil 15-iyul holatida tijorat banklarining viloyatda faoliyat ko'rsatib kelayotgan filiallari tomonidan 105 ta chorvachilik yo'nalishidagi loyihani moliyalashtirish uchun jami 44 mlrd 211 mln so'm va xorijiy kredit liniyalari hisobidan esa 877 ming 400 AQSH dollari miqdorida mablag'lar ajratildi.

Misol uchun, Qamashi tumanidagi “Murodov Rahmatullo Mavlonovich” MCHJ 2019-2021 yillarda sutchilik yoʻnalishida chetdan naslli qora mollar olib kelish va sutdan 14 xildagi mahsulotlar tayyorlash hamda goʻsht mahsulotlarini qayta ishlash maqsadida 447 ming 690 AQSH dollari miqdorida investitsiya kiritish loyihasi ishlab chiqildi.

Qashqadaryo viloyatida davlat tomonidan chorvachilik uchun yaratib berilayotgan imkoniyatlardan foydalanib, chorvachilikni rivojlantirishda amaliy ishlar bajarilmoqda. Taʼkidlash joiz, Yurtboshimiz tomonlaridan yurtimizda chorvachilikni yanada rivojlantirish uchun ulkan imtiyozlar berilmoqda. Shu oʻrinda chorvachilikni rivojlantirishni davlat tomonidan qoʻllab-quvvatlash maqsadida ajratilayotgan subsidiyalarni eslatib oʻtamiz. Bu imkoniyatlardan samarali foydalanib, chorvachilik tarmogʻini intensiv rivojlantirilsa, chorvachilik sohasidan tushadigan daromadning yuqori darajada koʻtarilishiga sabab boʻladi.

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*Ruziyev Z.I.
QMII “Moliya” kafedrası dotsenti
Suyunov D.R.
QMII “Moliya” kafedrası magistranti*

BANKLARDA ZAMONAVIY KREDIT XIZMATLARINI KO‘RSATISHNING AHAMIYATI

Annotatsiya. Ushbu maqolada tijorat banklarida zamonaviy va masofaviy bank xizmatlari ko‘rsatishning ilmiy-nazariy asoslari va O‘zbekistonda zamonaviy bank xizmatlarini ko‘rsatishning iqtisodiy ahamiyati o‘rganilgan.

Kalit so‘zlar: bank xizmatlari, masofaviy bank xizmatlari, zamonaviy bank xizmatlari bank xizmatlari, masofaviy bank xizmatlari, zamonaviy bank xizmatlari, internet-banking, raqamli banking, onlayn banking

*Ruziyev Z.I.
associate professor
“Finance” department
KEEI
Suyunov D.R.
master’s student
“Finance” department
KEEI*

THE IMPORTANCE OF PROVIDING MODERN CREDIT SERVICES IN BANKS

Abstract. In this article, the scientific-theoretical basis of providing modern and remote banking services in commercial banks and the economic importance of providing modern banking services in Uzbekistan are studied.

Keywords: banking services, remote banking services, modern banking services, banking services, remote banking services, modern banking services, internet banking, digital banking, online banking.

KIRISH

Hozirgi davrdagi tezkor va shiddatli rivojlanish hamda iqtisodiyotdagi tub o‘zgarishlar davrida raqamli iqtisodiyot va u bilan bog‘liq bo‘lgan bir qancha ilg‘or raqamli texnologiyalar iqtisodiyotimizga kirib kelmoqda. Shu sababli aholining turmush tarzini yanada yaxshilash va osonlashtirish, kompyuterlashtirish va mamlakatimiz taraqqiyotini yanada jadallashtirish maqsadida Respublikamiz rahbariyati bir qancha qarorlarni qabul qildi va “yo‘l xaritasi”ni ishlab chiqmoqda. O‘zbekiston Respublikasi bank tizimida mijozlarga taqdim etiladigan elektron bank xizmatlarini ko‘rsatish borasida tizimli ishlar

tashkil etilmoqda. Xususan, O‘zbekiston Respublikasi Prezidentining 2020 yil 12 maydagi “2020 - 2025 yillarga mo‘ljallangan O‘zbekiston Respublikasining bank tizimini isloh qilish strategiyasi to‘g‘risida”gi PF-5992-sonli Farmonida “O‘zbekiston Respublikasining bank tizimini isloh qilishning ustuvor yo‘nalishlaridan biri sifatida qaralib, bank xizmatlarini modernizatsiya qilish, samarali infratuzilma yaratish va banklar faoliyatini avtomatlashtirish, shuningdek, banklarning asosiy faoliyat turi bilan bog‘liq bo‘lmagan funksiyalarini bosqichma-bosqich bekor qilish orqali bank tizimining samaradorligini oshirishga juda katta e‘tibor berilmoqda.

Shuningdek, zamonaviy axborotkommunikatsiya texnologiyalarini keng joriy etish, tijorat banklarining biznes jarayonlarini avtomatlashtirish va masofaviy bank xizmatlari turlarini kengaytirish uchun zarur shart-sharoitlar yaratish; nazorat yuklarini, shu jumladan banklarning regulyator va davlat organlari bilan axborot almashinuvini takomillashtirish hamda hisobotlarni shakllantirish jarayonlarini soddalashtirish va avtomatlashtirish orqali ularni taqdim etish bilan bog‘liq bo‘lgan yuklarni kamaytirish; masofaviy bank xizmatlari, shu jumladan kontaktsiz to‘lovlar soni va qamrovini kengaytirish; avtomatlashtirilgan skoring tizimi, raqamli identifikatsiyalash va kredit konveyeridan keng foydalanish; bank ma‘lumotlari va tizimlarining axborot xavfsizligini kuchaytirish; bank sohasidagi yangi kontseptsiya va texnologiyalarni joriy qilish (fintex, marketpleys, raqamli bank) ” kabi vazifalarning belgilanganligi mavzuning dolzarbligidan dalolat beradi.

MAVZUGA OID ADABIYOTLAR TAHLILI

Mavzuga oid bir qator olimlarning tadqiqot ishlari bilan yaqindan tanishib chiqildi. Ularda olimlarning masofaviy bank xizmatlariga odi fikr mulohazalari tahlil qilindi. XX asrning 60-70 - yillari bank xizmatlari nazariyasi rivojlanishining boshlang‘ich bosqichi hisoblanadi. Bu paytda X. Duglas Michigan universitetining “Kreditlash sohasidagi bank siyosati” (1971 y.), D.Revel Uels universitetining «Raqobat va bank faoliyatini boshqarish» (1978 y.), Jeneva universitetining «Jamg‘arma banklarining kredit xizmatlari» (1974 y.) tadqiqotlari, Sh.Dereyning «Britaniya banklari strategiyasi va xalqaro raqobat» asari (1977 y.) xamda G.Brayanning «Bank sohasidagi raqobat» tadqiqoti (1970 y.) chop etiladi. Yuqorida qayd etilgan ilmiy ishlar bank xizmatlari bozori va uning bank xizmati segmentini o‘rganishga bag‘ishlangan. Rus iqtisodchi olimi V.K. Spilnichenkoning fikricha «Bank hisobvarag‘iga masofadan xizmat ko‘rsatish bu informasion xizmatlarning kompleksi va mijozning hisobvarag‘i bo‘yicha operatsiyalarni uning bankka tashrif buyurmasdan bergan topshirig‘iga asosan bajarishdir.

Bank hisobvarag‘iga masofadan xizmat ko‘rsatish tizimi telekommunikatsiya tizimi orqali bankning ma‘lumotlar bazasiga mijozning murojaatiga asoslanadi. N.I.Lixodeyeva esa bank hisob-varag‘iga masofadan xizmat ko‘rsatish tizimini mijoz tomonidan kompyuter texnologiyalaridan

foydalangan holda bankka tashrif buyurmasdan ya'ni masofadan buyurtmalar asosida bank xizmatlarini taqdim etish texnologiyasi sifatida e'tirof etgan.

TAHLIL VA NATIJALAR

Raqamli banking - bu onlayn banking va mobil bankingning kombinatsiyasi. Raqamli bank xizmatlaridan foydalanish xarajatlaringizni kamaytirishga yordam beradi, chunki bu nafaqat pulingizni, balki vaqtingizni ham tejaydi. Onlayn banking - bu o'z qurilmangizdan bank veb-sayti orqali bank xizmatlaridan foydalanishni anglatadi. Masofaviy bank xizmatlarini ko'rsatish turli bank operatsiyalarini masofadan amalga oshirish imkoniyatini beradigan xizmatlar kompleksidir. Buning uchun bank muassasasiga tashrif buyurmasdan turib kompyuter yoki mobil telefondan foydalanish kifoya. Masofaviy texnologiyalar mijozga bank xizmatlaridan foydalanishda maksimal qulaylik va bank bilan ishlash jarayonida vaqt hamda moliyaviy xarajatlarni minimallashtirish imkonini beradi. Masofaviy bank xizmatlarining rivojlanishi bank xizmatlari tizimida yangi hajmdagi va yangi shakldagi turli xizmatlarni yuzaga kelishiga sabab bo'ldi.

Masofaviy bank xizmatlarining asosiy tamoyili mijoz va bank o'rtasida turli axborotlarning masofadan almashinuvi hisoblanadi. Bunda bank tomonidan mazkur amaliyotning xavfsizligi ta'minlanadi. Internet-banking xizmati orqali mijoz o'z ish joyida yoki boshqa o'ziga qulay sharoitda: to'lovlarni o'tkazish; Jismoniy shaxslar tomonidan bank kartasi olish va mobil ilova orqali xaridlarni amalga oshirish uchun quyidagi amallarni bajarish lozim: - plastik kartani olish uchun o'zi tanlagan bankka pasport bilan murojaat qilish (onlayn tarzda tijorat banklarning rasmiy veb-saytlari orqali ham buyurtma berish imkoniyati mavjud) - bank kartasini pul mablag'lari bilan to'ldirish (bankomatning "cash-in" funksiyasi yoki bank xizmatlari markazlariga tashrif buyurish orqali); - bankka tashrif buyurib yoxud bankomat va infokiosklar orqali bank karta hisobvarag'ini o'z mobil telefon raqamiga bog'lash (biriktirish) orqali sms-xabarnoma yoki telegram-xabarnoma xizmatini faolashtirish; - tijorat banklari yoki to'lov tashkilotlari mobil ilovalarini Android operatsion tizimli mobil telefon uchun "Google Play market" internet ilovasidan yoki iOS operatsion tizimli mobil telefon uchun "Appstore" internet ilovasidan yuklab olish (ro'yxat ilova qilinadi); - mazkur mobil ilovalarda ro'yxatdan o'tish, ya'ni olingan bank karta raqami va amal qilish muddati kiritilgandan so'ng mobil telefonga kelgan maxfiy kodni kiritish orqali identifikatsiyadan o'tish; - xavfsizlikni ta'minlash maqsadida mobil ilovaga kirish uchun maxfiy kodni o'rnatish.

Mazkur amallarni bajarish uchun hech qanday bank xizmati bo'yicha vositachilik haqi olinmaydi. 1994 yil 13 iyul kuni Vazirlar Mahkamasining "O'zbekiston Respublikasi bank tizimini moliyaviy qo'llab-quvvatlash chora-tadbirlari to'g'risida"gi Qaror qabul qilindi. Unga asosan banklar qator soliqlardan ozod qilindi va bo'shagan mablag'larni o'z faoliyatini kompyuterlashtirishga sarflash shart qilib qo'yildi. Mazkur Qarorlarga binoan tijorat banklarining bo'limlari kompyuterlashtirila boshlandi va ular elektron

to'lov tizimiga qo'shib borildi. Avgust oyi oxiriga kelib mustaqillikning uch yilligi sharafiga elektron to'lovlar vaqtinchalik Nizomi yaratildi. Oktyabr oyidan boshlab esa elektron pochta respublika bank tizimida ishga tushirildi. Respublika bank tizimida buxgalteriya hisob-kitoblarni va bank amaliy ish kunini umumiy bir ko'rinishga keltirish uchun zarur ishlar amalga oshirildi. O'zbekiston Respublikasi Prezidentining 2018 yil 19 sentyabrdagi "Milliy to'lov tizimini rivojlantirish chora-tadbirlari to'g'risida"gi PQ-3945-sonli qaroriga asosan Milliy banklararo protsessing markazi 2018 yilning IV-choragida tashkil etildi va "Humo" to'lov tizimi 2019 yilning I-choragidan boshlab ishga tushirildi. Markaziy bankning banklararo to'lov tizimi quyidagi normativ-huquqiy hujjatlarga muvofiq tartibga solinadi:

XULOSA

Xulosa qilib aytganda, mamlakat iqtisodiyotining asosi hisoblangan bank tizimini yanada isloh qilish, uning barqarorligini oshirish, yuqori xalqaro reyting ko'rsatkichlariga erishishning ustuvor yo'nalishlari hamda axborot-kommunikatsiya texnologiyalaridan keng foydalangan holda zamonaviy naqd pulsiz hisob-kitoblar mexanizmlarini joriy etish bo'yicha olib borilayotgan ishlar banklarimiz tomonidan mijozlarga ko'rsatilayotgan xizmatlar sifati, to'lov intizomi va madaniyatini yangi bosqichga ko'tarilishini ta'minlash bilan birga, barcha iqtisodiy tarmoqlar taraqqiyotini mustahkamlashga ham o'zining ijobiy ta'sirini ko'rsatadi. Shunday zamonaviy texnologiyalar asosida masofaviy bank xizmatlari, xususan Internetbanking

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SEMANTICS OF PROVERBS EXPRESSING HUMAN IMAGE IN UZBEK LANGUAGE

Abstract. This article is devoted to the comparative analysis of phraseological units expressing the image of a person in the English and Uzbek languages, their expression and their place in the structure of speech, as well as a comparative typological analysis in terms of modern linguistics.

Key words: Phraseologism, emotional-expressive meaning, component, general market.

In modern psychology, there are four systems of character traits determined by different relationships of a person.

1. Traits that express their relationship to the community and some people (goodness, kindness, demandingness, arrogance, etc.).

2. Characteristics of attitude to work: (such as diligence, laziness, conscientiousness, responsible or irresponsible attitude to work).

3. Features expressing the attitude towards things (such as freedom or dirtiness, treating things sparingly or sparingly).

4. Features that express a person's attitude towards himself (respect - sensuality, ambition, pride, arrogance, humility, etc.).

From time immemorial, our ancestors expressed many ideas about the expression of human character in paremiological units. Folk proverbs show the character of a person, his behavior, qualities, and characteristics. Sometimes proverbs reflect on good and bad people.

The Uzbek phrase "Don't say pisht to a cat" is used for people who do not harm anyone. The fish stinks from the head. Var: "Muddy from the head of the water": "If mud comes from the head of the river, the downstream is subject to plunder." Metaphorical meaning: "When every work is rough and crude at the beginning, it gets worse and worse. Any corruption, decay, crisis, chaos, turmoil, etc., first of all starts from "above". In the past, people with advanced worldviews understood to some extent that the reason for the corruption of the existing social system is, first of all, the corruption, injustice, and corruption of those who rule the country (king, emir, khan) and also lead the people on the wrong path, and they used sarcastic sayings against them. used in such a way.

In Uzbek society, people who always laugh at someone else's plight, and put such a situation on their face, are reprimanded. One winter becomes one summer, the raven's cawing remains. If the fifteenth day of the month is dark, then the fifteenth day is bright, bad days will pass and good days will come. In the days of poverty and need, those who reproached you will continue to scold you. Don't

take such reproaches to yourself, don't read, don't despair, on the contrary, be brave and continue what you are doing", they comfort a person who is in a difficult situation with this saying. "Winter will pass, blackness will remain on the crow", "This world will pass, blackness will remain on you."

Some young people say these proverbs sarcastically while disrespecting and disrespecting the elderly and laughing at their weakness. When the wolf grows old, the puppy laughs. Var.: "When the wolf grows old, he becomes a toy for the rabbit"; "When a cat grows old, it becomes a game for a mouse"; "When a deer grows old, it becomes a sparrow"; "When the swan grows old, it becomes useful for the sparrow."

In the past, when a fish was caught, a man used a piece of wood with a tunic nailed to the tip like a trumpet, and would come to the lip of the water, to the bulung, to the belt. Two or three large nets were holding down towards the stream of water. As soon as he hit the wood, the water became cloudy and the sound of his slapping scared the fishes, they ran towards the flow of the water and fell into the net. It can be seen that these ideas are expressed in the following paragraph. This is the true meaning of these proverbs. In a metaphorical sense, they apply it to provocative and stupid people, such people, like a fisherman muddying the water and catching fish, seek their own benefits, destroy the relationship between two friends with incitements from nowhere, set people of one circle against people of another circle, and confuse the minds of many. and they want to achieve their goals by taking advantage of the storm (when the water is cloudy).

Folk proverbs are second only to national literature in terms of showing the capabilities and characteristics of the national language. I. Melchinko emphasizes the need to study the process of its historical development in order to research the national paremiological fund of the people. In this process, the layer of words that reflect the attitude of a person to a person is important from the point of view of reflecting the worldview, mutual relations and the linguistic, cultural and pragmatic situation in society. First of all, it is necessary to mention the two main ways of expressing this concept within the language: direct meaning expression and ways of expressing thoughts through figurative words. Uzbek folk proverbs are colorful in content. In the process of researching proverbs that reflect or refer to human characteristics, it is necessary to create a microfield like phraseological units.

In the cited proverbs, the word lazy directly refers to the character of a person, and the word's function in the sentence has different aspects.

We can divide the expression of concepts related to labor into two types. Conditionally this group: units representing direct labor, a group of units representing indirect labor. For the first group, we give the above-mentioned words as an example. In the second group, we can refer to proverbs with metaphorical words and figurative images, which refer to the quality of hard work. During the study of the paremiological foundation of the language, the above-mentioned two types of meaning expressions are clearly visible. On the example

of analyzed paremiological units, it can be said that the classification of units that directly and indirectly express the quality of hard work can also be seen on the example of proverbs. There are the following proverbs in the Uzbek language that refer to the quality of hard work: "The fault is not in the year, but in the work", "Don't trust your luck, trust your finger", "Work in vain until you sit idle", "A hunter who does not give will get a hunter from a God who does not give", "If you give - you receive, you sow - you reap", "Don't worry is the main rule, "no work is a rule", "What someone gives is prosperity, "what labor gives is satisfaction", "As long as you know how to talk, know how to work", "Talk is another", work is different", "Speak little words, "look at work a lot", "A tree is beautiful with a leaf, "a man is with his work", "Spring carries the water of a river, "a person's worth is work" increases", "Earth is a mother, water is a father, work is wealth", "Earth is a treasure, work is the key", "Don't be the owner of the land, be the owner of the work", "See the land with the rain decision, "with work - live", "If you don't burn your soul, it's a rule of heart", "If you don't climb a mountain, it's a hawthorn rule", "There is work, there is soup", "Work makes you hungry, the lazy avoids work", "Work attracts soup, " laziness - to the head", "Don't let the work defeat you, "you eat the work", "Fear the master of the work", "Sacks for those who work, "empty sacks for those who don't", "Working teeth, "unworked stone teeth", "Working teeth, not working teeth"

In some of the cited proverbs, the words work and work are mentioned, these proverbs form the first group of the classification given above. If you don't burn your life, it's a good rule, if you don't climb a mountain, it's a hawthorn rule; Proverbs such as "Don't trust your luck" and "Trust your finger" belong to the second group. Although the words "work" and "hard work" are not used in their content, they refer to work and hard work.

The use of proverbs to describe human characteristics has a long history. Proverbs that reflect the character of a person through the content of a proverb are listed in "Devoni Lugatit Turk" and can be expressed today in full content, incompletely, in the form of a phrase. In particular, the proverb "kishi alasi ijtin, yilqi alasi tashtin" mentioned in the Divan is used in today's Uzbek language in the style of "in the heart of a person" and reflects the image of a person who is malicious or does evil from the heart. The second part of the proverb is almost obsolete.

The meaning of proverbs is truly endless. Proverbs cover all spheres of human activity, reflect society's lifestyle, culture, life and history. As proverbs express the wisdom of the people, they appear as a unique code of ethics in which the most moral qualities of a person are approved, spirituality is confirmed, and any defects and vices are condemned. Many proverbs encourage a person to act correctly: they show a person what to do and what not to do, protect against negative actions. We will focus on the semantics of proverbs that are widely used in everyday life and are numerous in the composition of Uzbek folk proverbs. From the good the horse remains, from the bad - the dod.

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STRATEGIES USED IN THE DEVELOPMENT OF THE QUALITY OF EDUCATION OF HIGHER EDUCATION INSTITUTIONS OF DEVELOPED COUNTRIES

Annotation. This article will show the ways that several developed countries have overcome in improving the quality of education in higher educational institutions, the strategic measures that the same state has taken on a state scale for the development of education-the proposal of practical work that can be used as a template in our country.

Keywords. Higher education, structure of higher education, management, strategy, universities, quality of education, foreign experience.

Introduction. In the rise of the social and economic development of the country, the educational system and attention to it are crucial. Today, the use of innovative educational technologies in improving the quality of education, the foundation of modern principles and strategies in the management process leads to an increase in efficiency indicators in this area. A number of regulatory documents developed by our government, including the state program on implementation of the strategy "Uzbekistan — 2030"[1], which is currently in force, in the year "Youth and business support", developed a plan of practical activities for 2024, according to which, expanding coverage with higher education, improving the quality of training of specialists with higher education is confirmed for the 7th purpose. On the basis of this, directions are established to adapt to World educational standards in society through the training of personnel with high scientific potential and ensure high economic growth rates, to raise the level of knowledge of students in higher education through sustainable economic growth. In recent years, advanced experiences of developed foreign countries have been used in the application of modern educational technologies in higher education institutions.

Thematic literature analysis. The education system, including the issues of quality education in higher education institutions, has been studied by many foreign scientists. In Particular, the scientific works of Sh.V. Tagirova, Ye.S. Konovalova, A.A. Egorov, M.A. Suxomlinova, Ye.Yu. Shibanova are focused on the management of the educational sphere and the improvement of the information base. In this regard, in the study of economic development and structural changes in the effective management system in higher education in Uzbekistan, the scientific researches of A.O. Ochilov, Sh.Dj. Ergashxodjaeva,

J.Xamraqulov, X.U.Umarova, A.Maxmudov, F.U.Nazarova, E.Abdusattorov and others were studied in the scientific investigation.

Research methodology. When conducting research on the topic, research methods such as observation, comparison, conversation, questionnaire surveys were used.

Analysis and results. In our country, a lot of foreign experience is used in the transition of the higher education system to a digitized system based on modern technologies. In Uzbekistan, post - graduate education is established to last up to 3 years, in 2 different forms, namely as doctoral studies and as an independent researcher.

In this regard, it is advisable to give an example of the experience of the states of the United States, Germany, China, Japan, South Korea and France. In these countries, there is an emphasis on higher education, student empowerment indicators, integration between theory and practice. The improvement of innovative technologies in the course process serves as the main criterion for an increase in the quality of Education, an increase in economic and social efficiency. In these countries, the excellence of the management structure in higher education is an important factor in the maturation of personnel with high scientific potential.

(Table 1).

Organizational and economic mechanisms of higher education institutions in developed foreign countries (author development)

Name of states	Literacy rate	Form of institution providing higher education	Legal and economic mechanisms supporting higher education	Number of competitors per 1 seat, per person
USA	99 %	College, University	Morilla law	150-170
Germany	90 %	University, Institute, Academy	Federal law on financial aid for study	100-130
China	75 %	University, College and higher vocational school	Beijing Declaration on mutual cooperation in higher education	300-400
Japan	99 %	University and non-university	Education Act	80-120
South Korea	95 %	Upper school, college and University	"Foundation grants" for students	70-80
France	99 %	Higher School	"Savari" law	85-100

Based on the data in the table, the higher education system in the United States is given impartial state support to the education system based on Morilla law in colleges and universities. According to research conducted in 2019, the literacy rate is 99%, and the competition between applicants who have expressed

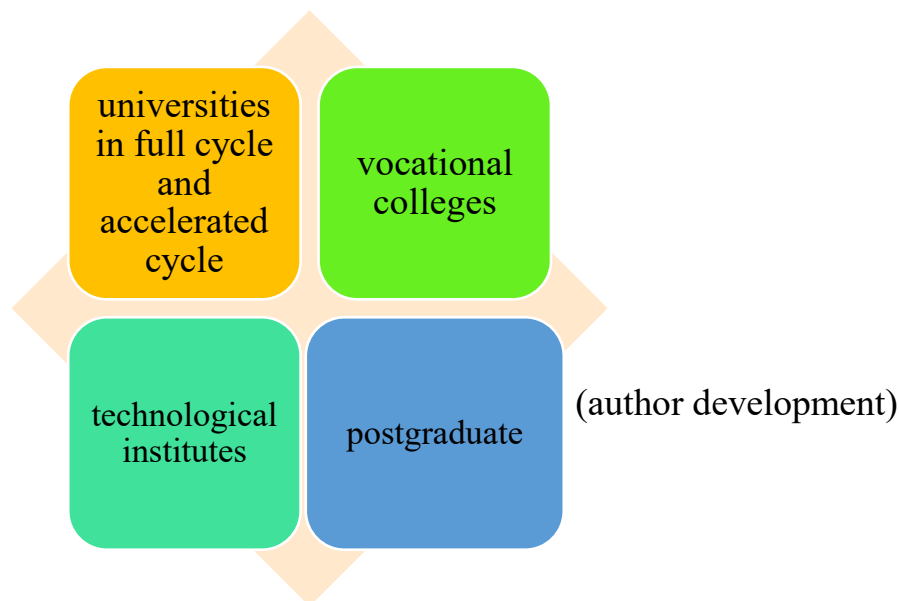
a desire to study in higher education institutions is high, that is, an average of 150-170 applicants per seat. The period of study in higher education is four years, and a bachelor's degree is awarded in the end. A notable aspect is that separately accredited HEI and faculties award the degree of Doctor of Medicine and law, for which special, enhanced training is required. In the case of Economics, a doctor of Science degree is awarded, requiring scientific research for 3 years or more. In Germany, the stages of education are 4 years, and in pedagogy is 3 years, and additional time is spent for practice, that is 18 months, as well as taking exams. In Germany, higher education institutions are distinguished by a large number of types and Regular updating of the management system. In particular, the system of higher education in Germany covers the system of universities and institutes, special higher educational institutions, higher schools of management and art, academies. This is also implemented in higher education institutions of other countries due to the excellence of the strategy for managing the education system in the state. In this respect, the literacy rate in Germany is 90 percent, and according to the Federal law on financial assistance for Study, economic mechanisms have been developed by the state. The Higher School, on the other hand, is self-governing, with the governing authority governed by a president elected for several years. In the management structure, the tasks are followed according to the step-by-step principle with the participation of several groups, which are clearly distributed. Its component is composed of professors, scientific staff and other staff. In the organizational structure, the process of studying students is freely organized, in which, along with a large number of educational stages, curricula are offered. There is no tuition fee, unless the student or their parents are able to raise food costs, under the Federal law on financial aid for tuition, they receive financial support. 50% of this support is added to their scholarship, while the rest is provided on loan.

The higher education system of the people's Republic of China includes University, College and higher professional schools, divided into several hierarchical categories in terms of management strategy [2]. Summed up, according to the scores obtained in the school graduation exams, graduates can be nominated for the upper or lower categories of higher education institutions. The admission process to Chinese universities is carried out in conditions of strict competition, and in some universities there are 200-300 people per seat. In China, there is a three – stage standard preparatory stage, as in other Western countries, that is, the duration of undergraduate studies is 4-5 years, the duration of graduate studies is 2-3 years, while doctoral studies are 2-3 years, depending on the fields, sometimes for 4 years there are two stages of education for graduate students, namely postgraduate and doctoral studies. The reason why the literacy rate in the PRC is relatively low, that is, 75 percent, is that some groups of the population still use hieroglyphs.

After higher education in South Korea, it is possible to study for Master's and doctoral studies. The South Korean higher education system is conducted at

the undergraduate, graduate and doctoral levels. The duration of study is 4 years in the baccalaureate, students receive a total of 140-150 credit hours of theoretical education. For 2-3 years in the magistracy, they strengthen their knowledge and favor a dissertation at the end. In doctoral studies, however, the duration of study is 3 or 4 years, depending on the areas. At the end of the study, a doctoral dissertation is defended by passing an oral or field-specific exam.

In the Japanese education system [3], higher education management is conducted in the form of a university and a non-university. The system of higher education in this state covers the following four types of educational institutions.



Draw 1: Types of higher education institutions in Japan

While the first group includes students studying in a full cycle for 4 years and universities studying in an accelerated cycle for 2 years, the second group takes the form of vocational colleges, and they are trained in a specific profession, with graduates working in the manufacturing or service sector. Technological institutes, on the other hand, are special preparatory schools. The fourth group of institutions of higher education is referred to as schools of education after receiving a diploma and is equated with the type of postgraduate education. In Japan, the non-universities are, in essence, secondary educational institutions, the management structures of which are notable for adapting to a more social orientation than the function of Higher Education. In recent years, although they are considered a full-fledged higher education institution from a legal point of view, in practice they do not correspond to higher schools in terms of training and prestige of their diploma. A system of Education funded under the "Savari"[4] law exists in France, and it is established that higher education will be carried out after obtaining a bachelor's degree of completion of Secondary Education. The literacy rate in this state was 99% in the 2020s, with 80-100 applicants per seat.

Conclusions and suggestions. In the process of studying the higher education system, structure and management strategies of developed countries, we came to the conclusion that the South Korean education system is suitable for the educational system, stages of Uzbekistan. In our opinion, in order to further improve quality indicators in higher education today, it is necessary to further improve the system of continuing education, to carry out the perfect integration between theory and practice. In addition, an increase in the level of use of modern innovative technologies also causes an increase in the level of coverage of qualified and competitive personnel.

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THE ROLE OF VISUAL ARTS IN THE PRESCHOOL EDUCATION SYSTEM

Abstract. In this article, the development of fine art in preschool education system has a great impact on the child's development, the influence of colors on the expansion of imagination and mental potential. In addition, the broad development of the imagination of a child engaged in visual arts can be expected from such people in society. In the following article, we will consider the role of visual arts in the formation of such individuals.

Key words. Integrated, global, intelligence, early education, mortart, Optimization, integration, methodical assurance, individual, reproductive.

Modern living conditions, its speed and wealth of information place high demands on a person. People of the new millennium are more integrated into the global cultural process, they feel themselves as part of a complete single system. But at the same time, there is a decrease in the level of spiritual and spiritual development, cultural and intellectual potential of people.

Recently, representatives of pedagogical, psychological, as well as practicing teachers have paid serious attention to the need to apply preschool children to the world of art. Preschool children have been shown to have great potential for perceiving, understanding, and emotionally reacting and creating works of art. The works of art, which express universal values and the uniqueness of national mentality, reflect the whole world around us: nature, social life, the inner world of man, etc., have a great influence on the formation of spiritual life. Develops his intellect and feelings, needs and creative abilities. [1]

Since time immemorial, a unique ability is first of all considered a hereditary, natural gift. If they tell us: "Mortart played the piano from the age of three" or "John Stuart Mill read the Latin classics at the same age", most of us simply say: "Of course, they are geniuses".

But from the in-depth analysis of Mortart and Mill's childhood life, it is known that their fathers used effective methods of upbringing in order to make their children mature as great personalities. [2]

Taking into account several examples, it is necessary to think more about the strong influence of education and environment on a newborn baby. Usually, we think we know everything about children. In fact, we have very little idea of their true potential. We pay more attention to the question of what to teach children older than three years. However, according to modern studies, 70-80 percent of brain cells can be developed by this age. This means that we are working very slowly on child education.

Early education does not necessarily mean forcing babies to learn different numbers and difficult terms. To direct the child means to increase his interest in science. Mother is the main mediator who helps us in this. Because mothers understand the child's feelings very well, and they know exactly when to educate them. Baiz think that education is a disciplined state of learning. The pre-school education system is preparation for disciplined education. Early childhood education is a term that refers to educational programs and strategies aimed at children from birth to eight years of age. This period of time is widely recognized as the most delicate and important stage of human life. Early childhood education often focuses on learning through play, based on the research and philosophy of Jean Piaget. Play meets children's physical, intellectual, language, emotional, and social needs (PILES). Children's curiosity and imagination naturally sparks limitless learning. Learning through play enables a child's cognitive development. This is the first form of cooperation between children. In this, children learn through their interactions with others. Many people are against the theory of learning through play because they think that children do not acquire new knowledge. In fact, play is the first way children learn to understand the world at a young age. Research shows that the way children play and interact with concepts at a young age helps explain differences in social and cognitive interactions later in life. Learning how to associate behavior with prescribed actions can lead children to a more capable future. As children watch adults interact, they pick up on subtle nuances, from facial expressions to tone of voice. They are learning different roles, learning how things work, learning to communicate and work with others. Thus, children learn more effectively and acquire more knowledge through activities such as dramatic play, artistic and social games. The term usually refers to preschool or infant care programs. According to the research of the brain, on the one hand, and the results of child psychology, on the other hand, the key to the development of a child's mental abilities is the experience he received in the first three years, that is, in the formation of brain cells. You cannot force something into a child, but children are very curious, so it is necessary to instill love and interest in teaching a child. For example, children If you want to draw something, you can't draw it in the same scale and size, the child draws with his imagination. And we're underestimating that because we want to include a child in the nested shell. In fact, by limiting the opportunities and talents of a young child, we put an obstacle to his future. Children do not build the world as we imagine. We can only make people interested in visual art, show the right way, the rest is the child's work. The format of the paper, tools, and techniques used in visual arts are just a limitation that we set. This young artist does not need any technique, but the interest in visual art will help the child to understand the existence.

It is known that visual art education is aimed at the artistic, aesthetic, moral and emotional development of students, at determining their creative potential, at acquiring theoretical and practical knowledge, skills and competences of children

in drawing, painting and composition. In the organization of the educational process at the children's art school, special attention is paid to the preparation of talented children to pass entrance exams to secondary and higher vocational education institutions in the field of visual arts and to study. Currently, the children's art school has created a system of programs aimed at preparing students for the profession. This program system expands the student's opportunities and provides opportunities for academic preparation, including freedom of choice and flexibility of individual development. In the process of teaching fine art, the teacher uses methods, forms and tools that serve to effectively develop the creative thinking of teenagers, solve creative problems, and activate imagination and fantasy in fine art classes.

In conclusion, it is permissible to say that a person's abilities and character are not determined at birth, but are formed during a certain period of life. It is more effective to try it in the early taste. One of the reasons that limit us is talent, the concept of genes is actually a factor that makes a person 1% talent and 99% effort. Establishing early education in fine arts helps to expand the scope of a child's imagination, to understand existence, to see color and perspective in nature. This, in turn, increases the child's mental potential. In the European education system, visual art is an important subject, and more lessons are allocated to children, and in the pre-school education system, children are taught the professional type of visual art.

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Qarshi muhandislik iqtisodiyot instituti
Ashurov Sh.M.
“Neft va gaz konlarini ishga tushirish va ulardan
foydalanish” kafedrasida assistenti
Islom Karimov Nomidagi Toshkent Davlat Texnika Universiteti.
Bekmuratov J.A.
“Texnologik mashinalar va jihozlar” kafedrasida talabasi
Qarshi muhandislik iqtisodiyot instituti

BURG‘ILASH MINORASINI MONTAJ VA DEMONTAJ QILISH TEXNOLOGIYASINI ASOSLASH

Annotatsiya. Maqolada neft va gaz sanoatining asosiy ustuni bo‘lgan neft va gaz quduqlarini burg‘ilashga tayyorlashda burg‘ilash minorasi o‘rnatish jarayoni, minorani montaj qilish va demontaj qilish jarayoni muhim rol o‘ynaydi. Bu esa o‘z navbatida quduqlarni samarali burg‘ilash, ularni o‘z vaqtida ishga tushirish va burg‘ilash jarayonida avariyalarni oldini olish, mumkin. Maqolada burg‘ilash samarali montaj qilish orqali vaqt, ishchi kuchi va resurslar sarfi haqida ma‘lumot beriladi. Burg‘ilash minorasi montaj qilish jarayonini zamonaviy va innovasion ishlanmalarni yaratish va ushbu zamonaviy montaj qilish usullari orqali quduqlarni kam vaqt, eng tejamkor va samarali burg‘ilash imkoniyatlarini oshirish bo‘yicha takliflar berilgan.

Kalit so‘zlar: burg‘i, quduqni burg‘ilash, kern, burg‘ilash uskunalari, tog‘ jinslari, murakkab quduqlar, shlam, rekultivatsiya, nasoslar, burg‘ilash davri.

Samadov A.Kh.
senior lecturer
"Process machines and equipment"
Karshi Engineering and Economic Institute
Ashurov Sh.M.
assistant
Department "Development and Operation oil and gas fields"
Tashkent State Technical
University named after Islam Karimov

SUBSTANTIATION OF DRILLING DERRICK INSTALLATION AND DISMANTLING TECHNOLOGY

Abstract. In the article, the process of installing the derrick, installing and dismantling the derrick plays an important role in preparing oil and gas wells for drilling, which is the main support of the oil and gas industry. This, in turn, makes

it possible to effectively drill wells, launch them in a timely manner, and prevent accidents during drilling. The article provides information on the use of time, labor and resources through an efficient drilling rig. Proposals were made to create modern and innovative developments of the drilling rig installation process and to increase the possibilities of drilling wells in less time, as economically and efficiently as possible due to these modern methods of dismantling.

Keywords: drilling, well drilling, core, drilling equipment, rocks, complex wells, drilling mud, reclamation, pumps, drilling cycle.

Burg`ilash minorasini montaj qilish.

Biror hududda neft va gaz qudug`ini burg`ilash tugallangandan so`ng burg`ilash qurilmalari yangi joyga yetkazilishi kerak va u yerda burg`ilash ishlarini boshlashga tayyorlash kerak. Burg`ilash qurilmalarining tashish usuli uning tuzilishiga, transport bazasiga, qurilmalarni qayta ko`chirish amalga oshiriladigan mahalliy sharoitlarga bog`liq. Minoralarni montaj qilish ishlari quyidagilardan iborat:

1. Ho`jalikdagi yer xujjatlashtirib olinadi va 4 gektar joy tekislanadi.
 2. Shu yerda burg`ilash uskunalari olib kelib o`rnatiladi, montaj qilinadi.
 3. Burg`ilash ishlariga tayyorgarlik ko`rish davri.
 4. Quduqni burg`ilash, unga yo`llanma, konduktor, oraliq tizma va ishlatish tizmasini tushirish – burg`ilash davri deyiladi.
 5. Shu quduqlardan mahsulot olib sinab ko`rish davri.
 6. Burg`ilash uskunalari qilish yoki boshqa joyga ko`chirish davri.
 7. Demontaj qilingandan keyin, maydonni tekislab, ishlab-chiqarishga tayyorlanadi.
- Shulardan 1-2-3-6 va 7-davrlarni minora qurish (vishkomontaj) brigadasi bajaradi.
4-davrni burg`ilash brigadasi bajaradi.
5-davrni, ya`ni quduqdan mahsulot chiqarib aniqlash ishlarini tekshirib ko`rish brigadasi bajaradi.

Burgilash qurilmasini tashish usuli eng avvalo transport bazasi imkoniyatlariga ko`ra oldindan aniqlanadi. Yuqorida e`tirof qilinganidek, hamma burg`ilash qurilmalari tuzilishiga ko`ra quyidagi tasniflarga ajratiladi:

- shinali pnevmatik yoki o`rmalab yuruvchi
- ko`chma yoki doimiy (statsionar) hamda
- o`ziyurar burg`ilash qurilmalariga bo`linadi.

Rekultivatsiya – burg`ilash uskunalari maydonga olib kelishdan avval vaqtinchalik foydalanishga olingan 4-gektar yerning 25-30 sm qalinlikdagi ustki mahsulot ekiladigan qismi buldozerlar yordamida yig`ib, bir chekkaga to`plab qo`yiladi. Burgilash ishlari tugatilgandan keyin barcha burg`ilash uskunalari maydonchadan olib chiqib ketiladi. Shlam omborlari va transheyalar ko`miladi va

burg`ilash ishlarini boshlashdan oldin yig`ib olingan to`proq qatlami o`z o`rniga qaytariladi.

Burg`ilash minorasini demontaj qilish.

So`nggi quduqni burg`ilash ishlari yakuniy ishlar olib borilib, burg`ilash qurilmasini demontaj qilishga topshiriladi. Burg`ilash qurilmasi demontajga qabul qilingandan so`ng quyidagi tayyorgarlik ishlari amalga oshirilmoqda: minora inshootlarini, nasoslarning gidravlik qismida bosimni yo`qotish, kompensator blokidagi havo yig`uvchilaridagi bosimni yo`qotish, kommunikatsiyalarni, mayda-blok metall konstruksiyalari va elektr kabellar demontaj qilish. Burg`ilash minorasini demontaj qilishdan oldin, barcha yirik bloklarni quduqlarni neft va gazni qazib olish korxonasiga topshirish uchun oxirgi quduqdan 15 m uzoqlikda yig`iladi. Montaj maydonida yo`naltiruvchi balkalarning to`liq to`plami rel`slar o`rtasidagi o`lcham 10000 ± 10 mm oraliqda o`rnatiladi. Yirik bloklarni demontaj qilish kompressor blokidan boshlanadi. Blokni yo`naltiruvchi balkalar bo`yicha ko`chiriladi. Blokning knextlarini stroplar bilan ulash, kran bilan ko`tarish va MAZ – maydon yoki trallerga tashish uchun o`rnatish.

Agar burg`ilash bloklarini tashish yo`lida) yuqori voltli elektr uzatish liniyalari kesib o`tsa, ko`rsatilgan bloklarda 4,5 m balandlikgacha bo`lgan bloklarning panasini, uskunalarini demontaj qilish zarur. Haqiqat, yirik blokli demontaj va tashish amaliyotida mavjud emas, chunki o`rnatilgan og`ir yuklarga ega bo`lgan nasos blokining birligi – 7,8 m, hajmiy blok – 9 m, minoralarni ko`tarish va tushirish mexanizmi – 9 m. Nasos bloki o`ng tomonga yo`naltirilgan yo`nalishlar bo`yicha ko`chiriladi. Uchta og`ir yuk tashuvchi TG-60, T-60 yoki T-70 traktorlar bilan nasos blokiga, kran bilan ko`tariladi, ko`chiriladi va yo`naltiruvchilar balkalari o`rniga o`rnatiladi. Shundan so`ng og`ir yuk tashuvchi traktorlar tomonidan nasos blokiga o`rnatiladi va o`z domkratlarini bilan nasos blokining transport ballariga o`tkaziladi va mustahkamlanadi. Og`ir yuk tashuvchilarning domkratlarini bilan blok rels va yo`naltiruvchilardan 150-200 mm yuqoriga ko`tariladi. Yo`naltiruvchilar traktorlar bilan nasos bloki ostidan ko`chiriladi. Shundan so`ng transport texnikasi o`rnatiladi. Shundan so`ng barcha og`ir yuk tashuvchilar va nasos bloki qurilayotgan quduq ustiga tashiladi. Shunday tartibda va shu sxema bo`yicha og`ir yuk tashuvchilarda (TG-60, T-60 yoki T-70) hajmiy blokni demontaj qilish va o`rnatish ishlari amalga oshiriladi. Minora blokini demontaj qilish umumiy ko`rinishdagi chizmaga muvofiq minorani tushirishdan boshlanadi. Minorani ko`tarish va tushirish qurilmasi minora markazidan 34 m uzunlikda qabul qiluvchi ko`prik stellajlarini o`rnatadi, minorani troslar yordamida tushiriladi va maxkamlanadi, tashish sxemasiga muvofiq og`ir yuk tashuvchi texnikaga mustahkamlanadi va minorani tushiriladi.



1 – rasm. Minorani demontaj qilish.

Shundan soʻng minorani oldiga minorani tashish uchun moʻljallangan ogʻir yuk tashuvchini keltiramiz, uchta ogʻir yuk tashuvchini (TG-60, T-60 yoki T-70) minorani tagiga olib kelib minorani oʻrnatamiz, texnikani tashish sxemasiga muvofiq holda, qurilayotgan maydonga minorani keyingi burgʻilash maydonchasiga tashib boramiz.

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ПРИ БУРЕНИИ ПЛАСТЕЙ НИЗКОГО ДАВЛЕНИЯ. Экономика и социум, (2-2 (93)), 764-768.

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*Samadov A.X.
"Texnologik mashinalar va jihozlar" kafedrasida katta o'qituvchisi
Qarshi muhandislik iqtisodiyot instituti
Ashurov Sh.M.
"Neft va gaz konlarini ishga tushirish va ulardan
foydalanish" kafedrasida assistenti
Islom Karimov Nomidagi Toshkent Davlat Texnika Universiteti*

ZAMONAVIY NEFT VA GAZNI TASHISH VA SAQLASH TEKNOLOGIYASI VA JIHOZLARI

Annotatsiya. Xalq xo'jaligi tarmoqlarining uzluksiz ishlab turishi neft, gaz, neft mahsulotlarini o'z vaqtida sifatli yetkazib berilishiga bog'liq. Mahsulotlarni yetkazib va tarqatish jarayonlari tashish va saqlash tizimi orqali amalga oshiriladi. Bu tizim temir yo'l, suv yo'li, quvuruzatmalar, avtomobil transportlarini, mamlakat hududida ratsional tarzda joylashgan neftbaza tarmoqlarini, gaz saqlagichlarni, benzin-gaz tarqatuvchi stantsiyalarni o'z ichiga oladi.

Kalit so'zlar: tanker, tabiiy gaz, gaz quvurlari, neft omborlari, rezervuarlar saroyi, gaz saqlagichlari, gazgolderlar, yer osti gaz omborlari, temir yo'l transporti, barjalar.

*Samadov A.Kh.
senior lecturer
"Technological machines and equipment"
Karshi Engineering and Economic Institute.
Ashurov Sh.M.
assistant
department "Development and operation oil and gas fields"
Tashkent State Technical
University named after Islam Karimov*

MODERN TECHNOLOGIES AND EQUIPMENT FOR TRANSPORTATION AND STORAGE OF OIL AND GAS

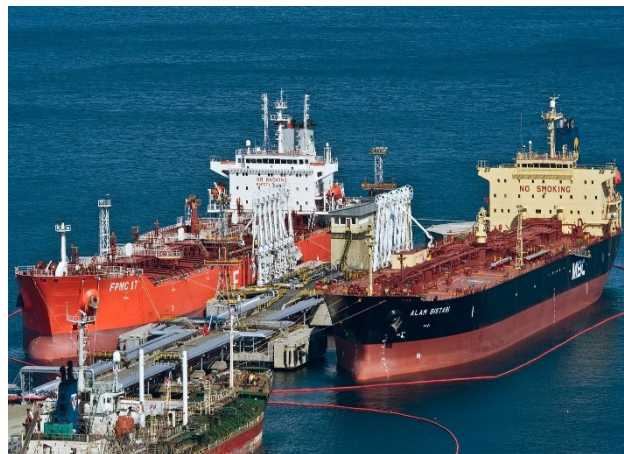
Abstract. The uninterrupted operation of the national economy depends on the timely and high-quality delivery of oil, gas and petroleum products. The processes of delivery and distribution of products are carried out through a transportation and storage system. This system includes railways, waterways, pipelines, road transport, rationally located oil storage networks, gas storage facilities, and gasoline and gas distribution stations.

Key words: tanker, natural gas, gas pipelines, oil storage facilities, tank farm, gas storage facilities, gas holders, underground gas storage facilities, railway transport, barges.

Mustaqillik yillarida bu soha ancha rivojlanib hozirgi zamon talablariga ko'ra yanada rivojlanmoqda.



1 – rasm. Gaz tashuvchi tanker.



2 – rasm. Neft tashuvchi tanker.

Yiliga ishlab chiqarilayotgan 55 mlrd m³ dan ortiq tabiiy gaz, “O’ztransgaz” AK qaramog’idagi uzunligi 13000 kmdan ortiq magistral gaz quvurlari orqali kerakli manzillarga yetkazib berilmoqda. Iste’molchilarni neft va neft mahsulotlari bilan ta’minlash umumiy rezervuarlar saroyining hajmi 1,1 mln m³ dan ortiq bo’lgan 60 ta taqsimlovchi neft omborlari va umumiy rezervuarlar saroyining hajmi 380 ming m³ bo’lgan 2 ta uzatuvchi neft omborlari (Angren va Pop) orqali amalga oshirilmoqda. Bulardan tashqari Respublikamizda xalqaro andozalarga javob beruvchi 6 ta “Kompleks avtoservis punktlar” tashkil etilgan.



3 – rasm. Magistral quvuruzatmalar.

Iste’molchilar tomonidan gazni ishlatishdagi notekisliklarni (sutkalik, mavsumiy) kompensatsiya qilish maqsadida Respublikamizda yer usti gaz

saqlagichlari (gazgolderlar) va yer osti gaz omborlaridan (Xo'jaobod, Gazli, Shimoliy So'x) foydalanilmoqda.

O'zbekistonda neft va gaz ishlab chiqarishning rivojlanishi magistral quvurlar qurilishining tez sur'atlar bilan o'sishiga olib keldi. Quvurlarni qurish 1960-yildan boshlanib, hozirgi kunda ularning umumiy uzunligi 13 ming km dan ortiq.

Bu quvurlar "O'ztransgaz" AK tarkibida umumlashgan. Ularning diametrlari bo'yicha taqsimlanishi 15-jadvalda keltirilgan.

Respublikamizdagi yer osti magistral gaz quvurlari uzunligining diametrlari bo'yicha taqsimlanishi.

1 – jadval

T/r	Quvur diametri (mm)	Uzunligi (km)	T/r	Quvur diametri (mm)	Uzunligi (km)
1	1420	616,38	11	219	527,084
2	1220	2299,89	12	168	6,175
3	1020	4682,52	13	159	162,173
4	820	250,71	14	146	4,46
5	720	1626,02	15	133	0,86
6	530	893,44	16	114	15,522
7	426	346,03	17	108	32,669
8	377	74,871	18	89	13,512
9	325	951,86	19	76	0,4
10	273	393,731	20	87	10,51

Neft, gaz, neftgazkondensat mahsulotlarini tashish turlari quyidagicha:

- magistral quvurlar orqali,
- temir yo'l transporti orqali,
- avtomobil transporti orqali,
- havo orqali,
- suv havzalari orqali (tankerlar va barjalar),



4 – rasm. Avtotsisterna.

Quvur transporti bilan bir qatorda neft va suyultirilgan gazlarni tashuvchi boshqa transport vositalari ham rivojlandi. Ularni suv transportida tashishda yuk ko'taruvchanlik qobiliyati 5000 tonnadan 45000 tonnagacha bo'lgan dengiz va daryodan (tanker va barjalaridan), shuningdek, yuk ko'taruvchanlik qobiliyati 450 ming tonnadan 1 mln tonnagacha bo'lgan dengiz va okean supertankerlaridan ham foydalanilmoqda.



5 – rasm. Temir yo'l tsisternalari.

Temir yo'l orqali neft, neft mahsulotlarini va suyultirilgan gazlarni tashishda yuk ko'taruvchanlik qobiliyati 50, 60, 90 va 120 tonnaga teng bo'lgan oddiy va maxsus konstruksiyaga ega bo'lgan vagon-sisternalardan foydalanilmoqda.

Neft, va neft mahsulotlari va suyultirilgan gazlarni tashishda yuk ko'taruvchanlik qobiliyati 4 m³ dan 30 m³ gacha bo'lgan avtosisternalardan ham foydalaniladi.

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Samadova Z.Z.
*Al-Muhammad Xorazmiy nomidagi Toshkent
axborot texnologiyalari universiteti o'qituvchisi*

MOLIYAVIY TEXNOLOGIYALAR ORQALI MOLIYAVIY RISKLARNI BARTARAF ETISH

Annotatsiya. Ushbu maqolada moliyaviy texnologiyalar va moliyaviy risklar to'g'risida tushunchalar, raqamli iqtisodiyot sharoitida moliyaviy texnologiyalarning ahamiyati haqida fikrlar yuritilgan. Moliyaviy risklarni qanday qilib moliyaviy risklar orqali bartaraf etish mumkinligi to'g'risida tavsiyalar berilgan.

Kalit so'zlar: moliyaviy texnologiya, fintech, moliyaviy risklar, raqamli iqtisodiyot, avtomatlashtirish

Samadova Z.Z.
teacher
**Tashkent University of Information Technologies named after Al-Muhammad
Khorezmi**

ELIMINATION OF FINANCIAL RISKS THROUGH FINANCIAL TECHNOLOGIES

Abstract. This article discusses the concepts of financial technology and financial risks, the importance of financial technology in the digital economy. Recommendations are given on how to eliminate financial risks through financial risks.

Keywords: financial technology, fintech, financial risks, digital economy, automation.

Kirish. So'nggi yillarda jadal bilan butun jahonda raqamli texnologiyalar rivojlanib bormoqda. Raqamli texnologiyalar rivojlanishi esa raqamli iqtisodiyot rivoji uchun ulkan hissa qo'shmoqda. Axborot texnologiyalarining rivojlanishi tufayli ko'pgina mamlakatlarning moliya va pul tizimi o'zgarib boshladi. Masalan, naqd to'lovlardan naqd pulsiz onlayn to'lovlarga faol o'tish; banklar yoki mikromoliya tashkilotlari tomonidan berilgan kreditlardan onlayn platformalar orqali boshqa jismoniy shaxslardan qarz olishga qadar. Moliyaviy texnologiyalarining rivojlanishi moliyaviy bozorlarda paydo bo'ladigan turli moliyaviy risklarni bartaraf etish uchun qo'l kelmoqda. Moliyaviy texnologiyalar orqali moliyaviy risklarni boshqarishning dolzarbligi, moliyaviy tizimlarni ko'paytirish va moliyaviy axborotlar bilan ishlashning ishonchliligini ta'minlashni talab qiladi. Bundan tashqari, texnologik vositalarni qo'llab-quvvatlash, ma'lumot xavfsizligi va himoya tizimlarini joriy etish, xodimlar uchun moliyaviy xavfsizlik

ta'limoti o'tkazish va moliyaviy risklarni identifikatsiya qilish va boshqarish jarayonlarini tahlil qilishning juda muhim ekanligini aytilishimiz mumkin.

Mamlakatimizda "Raqamli O'zbekiston — 2030" strategiyasiga muvofiq iqtisodiyot tarmoqlari va hududlarini raqamlashtirish, davlat axborot tizimlari va elektron xizmatlarni joriy etish, shuningdek, raqamli texnologiyalardan keng foydalanishni ta'minlash bo'yicha xalq ta'limi, davlat xizmatlari, sud, moliya va bank tizimida kompleks chora-tadbirlar amalga oshirilmoqda⁷⁵.

Moliyaviy risklarni moliyaviy texnologiyalar orqali bartaraf etish iqtisodiy o'sish va barqarorlikni qo'llab-quvvatlovchi mustahkam, samarali va inklyuziv moliyaviy tizimni rivojlantirish uchun juda muhimdir.

Moliyaviy texnologiyalar (FinTech) moliyaviy dunyoning eng tez rivojlanayotgan sohalaridan biriga aylandi. Blokcheyn va sun'iy intellekt kabi yangi texnologiyalarning rivojlanishi bilan moliya sektori o'z faoliyatini yaxshilash va samaradorlikni oshirish uchun yangi imkoniyatlarga ega bo'lmoqda. Ushbu maqolada biz moliya sohasida qanday yangi texnologiyalar qo'llanilayotgani va moliyaviy risklarni bartaraf etishga qanday ta'sir qilishini ko'rib chiqamiz.

Mavzuga oid adabiyotlar sharhi

Moliyaviy texnologiyalar to'g'risida ko'plab olimlar kitoblar, maqolalar yozishgan, ilmiy ishlar qilishgan.

Roy S. Freedman o'zining "Moliyaviy texnologiyalarga kirish" nomli kitobida tizimlar qanday ishlashini - ular qanday paydo bo'lganini va qanday rivojlanganligini texnologik nuqtai nazardan tushuntirib bergan. Moliyaviy modellar ortidagi mantiqiy asosni ko'rsatish uchun moliyaviy formulalar, baholar va munosabatlarni sodda va tez olish uchun kompyuter algebra tizimlari texnologiyasidan foydalanilgan. Ko'pgina moliyaviy hisob-kitoblar va ma'lumotlar taqdimotini amalga oshiradigan dasturlar C, C++, Java, Visual Basic, MuPAD kompyuter algebra tizimi va AMPL modeli spetsifikatsiyasi tilida, shuningdek, turli XML dialektlarida ko'rsatilgan⁷⁶.

D. Voycik [2] (Wójcik, 2021) fikricha, haqiqiy fintech 21-asrda shakllangan va kichik innovatsion biznesning moliyaviy bozorida bo'sh o'rinlarni egallay boshlagan yoki shakllana boshlagan startap harakatining rivojlanishi bilan bog'liq va muqobil biznes. bank vositalari va moliyaviy aktivlarni boshqarish xizmatlari: uning fikricha, boshlang'ich nuqtani Buyuk Britaniyada Zopa P2P kreditlash xizmati joriy etilgan va dunyodagi birinchi nobank kredit agregatoriga aylangan 2005 yil deb hisoblash mumkin⁷⁷.

T. Puschmann, S. Hoffmann, V. Xmarskiy fintechning mustaqil bozor ishtirokchisi, birinchi navbatda banklar sifatida paydo bo'la olmasligini ta'kidlaydilar. Eng yangi texnologiyalarni joriy etish va ulardan foydalanish

⁷⁵ O'zbekiston Respublikasi Vazirlar Mahkamasining qarori, 15.06.2021 yildagi 373-son

⁷⁶ Roy S.Freedman Introduction to financial technology 2006

⁷⁷Fintech: sanoatning qisqacha tarixi (19.11.2019) [Elektron resurs]. URL: <https://frankrg.com/8732> (kirish sanasi: 07/12/2021, bepul)

hamda yangi davr tendentsiyalarini kuzatish uchun vaqt bor, xususan: raqamli iqtisodiyot va natijada moliyaviy aktivlarni boshqarish operatsiyalari samaradorligining pasayishi bilan bir vaqtda tranzaksiya xarajatlari oshib bormoqda deb ta'kidlaydilar,⁷⁸.

Jiyanova N. o'zining ilmiy ishlarida iste'molchilarga taklif eta oladigan moliyaviy xizmatlar sanoatining nisbatan yosh, ammo tez rivojlanayotgan sohasi arzon narxlarda turli xil moliyaviy xizmatlar ko'rsatish, aholining ilgari kredit, bank va tegishli xizmatlardan foydalana olmagan qatlamlariga xizmatlar taklif qilish, moliyaviy xizmatlarning yangi turlarini yaratish, moliya bozorlarida bozor samaradorligini oshirish kerakligi haqida ta'kidlab o'tgan⁷⁹.

"Moliya bozori va moliyaviy texnologiyalar" darsligida moliyaviy texnologiya - bu moliyaviy muammolarni hal qilish yo'llarini o'ylab topish jarayonidir deb ta'rif berilgan. Umuman olganda, o'z faoliyatidagi boshqa barcha muammolar korxonalarining moliyaviy muammolarida o'z ifodasini topadi. Moliyaviy texnologiyalar moliyaviy xizmatlar va texnologiya sektorlari chorrahasida joylashgan dinamik segmentdir. Unda texnologik startaplar va bozorning yangi ishtirokchilari hozirda an'anaviy moliyaviy xizmatlar sektori tomonidan taqdim etilayotgan mahsulot va xizmatlarga innovatsion yondashuvlarni qo'llashadi. Moliyaviy texnologiyalar segmenti tez rivojlanib, an'anaviy qiymat zanjiridagi narsalarning odatiy tartibini buzadi⁸⁰.

Yuqoridagi olimlar tomonidan olib borilgan tadqiqotlar asosan moliyaviy texnologiyalarning nazariy va uslubiy masalalariga bag'ishlangan bo'lib, ularda moliyaviy texnologiyalar samaradorligini oshirishning faqat ayrim toifalari va yo'nalishlari ko'rib chiqildi. Biroq ularning ishlarida moliyaviy texnologiyalarni takomillashtirish jarayoni va ular orqali moliyaviy risklarni bartaraf etish yo'llari bilan bog'liq real amaliy masalalar ko'rib chiqilmagan.

Tadqiqot metodologiyasi

Ushbu maqolaning metodologiyasida kuzatish, umumlashtirish, guruhlash, qiyosiy tahlil va nazariy izohlash usullari qo'llaniladi. Bundan tashqari, maqolaning ilmiy asosini xalqaro standartlar va me'yoriy hujjatlar, mamlakatimiz olimlari tomonidan olib borilgan tadqiqot ma'lumotlari va xorijiy ilmiy nashrlar tashkil etadi.

Tahlil va natijalar

Moliyaviy texnologiyalari orqali moliyaviy risklarni bartaraf etish uchun moliyaviy risklar va ularning turlari haqida tushunchaga ega bo'lmog'imiz zarur.

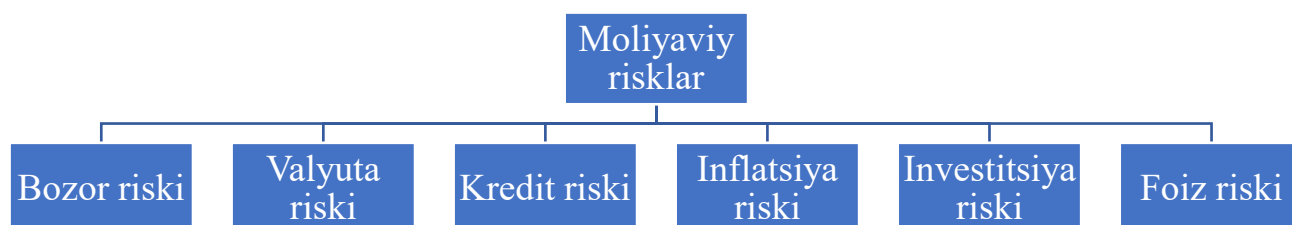
Moliyaviy risk deganda moliyaviy bitimlarni amalga oshirish (bankka mablag'larni qo'yish, aksiyalar muomalasi, birja faoliyati va hokazo) chog'ida

⁷⁸ Puschmann T., Hoffmann C. H., Khmarskiy V. (2020). How green fintech can alleviate the impact of climate change—The case of Switzerland Sustainability. (12(24)). 1–28. doi: 10.3390/su122410691.

⁷⁹ Жиянова Н. ФИНАНСОВЫЕ ТЕХНОЛОГИИ И ИХ ВЛИЯНИЕ НА ФИНАНСОВЫЕ РЫНКИ //Economics and Innovative Technologies. – 2022. – Т. 10. – №. 3. – С. 9-17.

⁸⁰ S.Elmirzayev, N.Shavkatov, N.Sherkuziyeva, A.Karimov, D.Abduraximova, S.Omonov Moliya bozori va moliyaviy texnologiyalar: Darslik – T.: « DIADEMA NUR SERVIS » OOO. – 412 b. 2023-yil

vujudga keladigan risklar tushuniladi⁸¹. Moliyaviy risklar - moliyaviy faoliyatni amalga oshirish shartlari noaniq bo'lgan vaziyatda daromad va kapitalni yo'qotish shaklida salbiy moliyaviy oqibatlarining yuzaga kelish ehtimoli. Turli sohalari sohalarda turli moliyaviy risklar paydo bo'lishi mumkin. Risklarni oqilona boshqarish mumkin, ya'ni ma'lum darajada xavfli hodisaning sodir bo'lishini bashorat qilish va xavf darajasiga qarab chora ko'rish imkonini beradigan turli xil choralarni qo'llash.



1-rasm. Moliya risklarning tasniflanishi⁸²

Fintech yoki moliyaviy texnologiya bizning moliyaviy operatsiyalar va xizmatlarni boshqarish uslubimizda inqilob qildi. Biroq, har qanday boshqa soha singari, fintech ham o'ziga xos qiyinchiliklar va muammolarga duch keladi.

Moliyaviy texnologiyalarning asosiy maqsadi⁸³:

- ✓ Moliyaviy xizmatlarning mavjudligi, sifati va turlarini oshirish.
- ✓ Moliyaviy sektordagi risklar va xarajatlarni, shuningdek, iste'molchilar uchun xizmatlar narxini kamaytirish.
- ✓ Moliya bozorida raqobatni rivojlantirishni qo'llab-quvvatlash.
- ✓ Bank jarayonlarining xavfsizligi va barqarorligini ta'minlash.

Moliyaviy texnologiyalar orqali risklarni bartaraf etishda integratsion va innovatsion yondashuvlar, kiber xavfsizlikga e'tibor berish, ma'lumotlar analitikasi va avtomatlashtirilgan jarayonlarni qo'llash kabi yondashuvlar katta ahamiyatga ega. Bu usullar bilan, moliyaviy tashkilotlar risklarni aniqlash, tahlil qilish va ularni minimallashtirishda muvaffaqiyatli bo'lishadi.

Bu texnologiyalar moliyaviy sohasida moliyaviy risklarni kamaytirish va moliyaviy operatsiyalarni ishonchlilik va effektivlik bilan bajarishda yordam berishi mumkin. Yangi texnologiyalardan foydalanish shuningdek, yangiliklarga moslashtirilgan xavfsizlik chora-tadbirlarini amalga oshirishni talab etadi

Moliyaviy texnologiyalar, moliyaviy sohasida innovatsiyalarni amalga oshirish, xizmatlar va operatsiyalarni yaxshilash, ma'lumotlar tahlili va boshqa moliyaviy jarayonlarni rivojlantirish uchun kerak. Quyidagi sabablarga ko'ra moliyaviy texnologiyalarga ehtiyoj bor:

⁸¹ Moliyaviy risklar nazariyasi: O'quv qo'llanma / Sh.Q.Fozilchayev, N.G.,Xidirov; O'zbekiston Respublikasi Oliy va o'rta maxsus ta'lim vazirligi. – T.: "Iqtisod-Moliya", 2019. - 240 b.

⁸² Moliyaviy risklar nazariyasi: O.,quv qo.,llanma / Sh.Q.Fozilchayev, N.G.,Xidirov; O.,zbekiston Respublikasi Oliy va o.,rta maxsus ta"lim vazirligi. – T.: "Iqtisod-Moliya", 2019. - 240 b.

⁸³ <https://trends.rbc.ru/trends/industry/618b6f349a794772fa50adf4?from=copy>

✓ Birinchi sababi avtomatlashtirish va avtomatlashtirish. Moliyaviy texnologiyalar, moliyaviy operatsiyalarni avtomatlashtirish yoki avtomatlashtirish yordamida ishni osonlashtiradi. Bu jarayonlarning avtomatlashtirilishi moliyaviy institutlar uchun vaqt va resurslarni tejashda yordam beradi.

✓ Ikkinchi sababi ma'lumotlar tahlili. Moliyaviy sohada yetarli ma'lumotlar mavjud bo'lishi va ularni tahlil qilish, tendentsiyalarni aniqlash, risklarni oldini olish va strategik qarorlar qabul qilishda yordam beradi.

✓ Uchinchi sababi xavfsizlik. Moliyaviy texnologiyalar, xavfsizlik sohasida yangiliklarni taklif etadi va moliyaviy operatsiyalarni hofizalashning yuqori darajada bo'lishini ta'minlaydi.

✓ To'rtinchi sababi moliyaviy innovatsiyalar. Moliyaviy texnologiyalar, yangi xizmatlar va mahsulotlarni rivojlantirish va taklif etishda yordam beradi. Bu, moliyaviy sohaning rivojlantirilishiga yordam beradi va iste'molchilarga qulaylik yaratadi.

✓ Beshinchi sababi ishonchlilik va ishonchli hisob-kitob Moliyaviy texnologiyalar, moliyaviy operatsiyalarni ishonchli tarzda bajarish, moliyaviy risklarni tahlil qilish va ishonchlilikni oshirish uchun yordam beradi.

✓ Oltinchi sababi mobil ilovalar. Moliyaviy texnologiyalar, mobil ilovalar orqali mijozlarga moliyaviy xizmatlarni tezroq va qulayroq taklif etishga imkon beradi.

Fintechlardan foydalanish qanchalar samarador bo'lmasin, ulardan foydalanishda turli xil muammolarga duch kelish mumkin.

Birinchi, tartibga solish muammolari. Fintech kompaniyalari ko'pincha yuqori darajada tartibga solinadigan muhitda ishlaydi, bu mamlakatdan mamlakatga sezilarli darajada farq qilishi mumkin. Ushbu qoidalarga rioya qilish va ularga rioya qilish fintech startaplari uchun katta muammo bo'lishi mumkin, ayniqsa ular xalqaro miqyosda kengayib boradi.

Ikkinchi, kiberxavfsizlik risklari. Fintech kompaniyalari nozik moliyaviy ma'lumotlar bilan shug'ullanadi va bu ularni kiberjinoyatchilar uchun jozibador maqsadlarga aylantiradi. Mijozlar ma'lumotlari va tranzaksiyalarini himoya qilish uchun mustahkam kiberxavfsizlik choralarini ta'minlash juda muhim, ammo bu doimiy ravishda rivojlanib borayotgan kiber tahdidlarning oldini olish uchun doimiy kurash bo'lishi mumkin.

Uchinchi, mijozlarning ishonchi va qabul qilinishi. Moliya sanoatida ishonch muhim va fintech kompaniyalari yangi, notanish moliyaviy xizmatlardan ehtiyot bo'lishlari mumkin bo'lgan mijozlar bilan ishonchni mustahkamlashda ko'pincha qiyinchiliklarga duch kelishadi. Ushbu shubhani bartaraf etish va fintech mahsulotlari va xizmatlarini keng qo'llashni rag'batlantirish muhim to'siq bo'lishi mumkin.

To'rtinchi, eski tizimlar integratsiyasi. Ko'pgina an'anaviy moliya institutlari zamonaviy fintech yechimlari bilan osonlikcha integratsiyalashuvi mumkin bo'lmagan eski tizimlarda ishlaydi. Fintech kompaniyalari ushbu

muassasalar bilan hamkorlik qilish yoki ularga xizmat ko'rsatishda qiyinchiliklarga duch kelishi mumkin, bu esa ulardan bo'shliqni bartaraf etishning innovatsion usullarini topishni talab qiladi.

Beshinchidan, Fintech startaplari ko'pincha o'z operatsiyalarini kengaytirish va vaqt o'tishi bilan barqaror o'sishni ta'minlash muammosiga duch kelishadi. Moliyaviy barqarorlik va rentabellikni ta'minlagan holda tez kengayishni boshqarish fintech kompaniyalari uchun nozik muvozanatlash harakati bo'lishi mumkin.

Oltinchidan, ma'lumotlar maxfiyligi va etikasi bo'yicha fintech kompaniyalari shaxsiylashtirilgan xizmatlarni taqdim etish uchun katta hajmdagi mijozlar ma'lumotlarini to'plash va tahlil qilish bilan birga, ular ma'lumotlar maxfiyligiga oid murakkab qoidalar va axloqiy mulohazalarni ko'rib chiqishlari kerak. Ma'lumotlarning mas'uliyatli va axloqiy tarzda ishlanishini ta'minlash mijozlar ishonchini va tartibga solish talablariga rioya qilishni ta'minlash uchun juda muhimdir.

Yetinchidan, raqobat va bozor to'yinganligi. Fintech sanoati yuqori raqobatbardosh, bozorga yangi startaplar muntazam kirib boradi. Fintech kompaniyalari o'zlarini raqobatchilardan ajratib turishlari va dolzarb bo'lib qolish va bozor ulushini egallash uchun doimiy ravishda innovatsiyalar qilishlari kerak.

Ushbu muammolarni hal qilish me'yoriy hujjatlarga muvofiqlik, innovatsion texnologiya yechimlari, kuchli kiberxavfsizlik choralari, samarali risklarni boshqarish va mijozlarga yo'naltirilgan yondashuvni talab qiladi. Ushbu qiyinchiliklarni muvaffaqiyatli hal qila oladigan fintech kompaniyalari moliya sanoatini buzishga va moliyaviy xizmatlarni etkazib berish va ulardan foydalanish usullarini mazmunli o'zgartirishga yordam beradi.

Moliyaviy texnologiyalar (FinTech) moliyaviy sohasida innovatsion yechimlarni taklif etadi va moliyaviy xizmatlarni osonlashtiradi. Bu texnologiyalar orqali moliyaviy tizimlar boyicha xizmatlarni yaxshilaydi, texnikaviy texnologiyalar va ma'lumotlar analitikasi yordamida moliyaviy jarayonlarni boshqarish imkoniyatini oshiradi va moliyaviy sohani rivojlantiradi.

Xulosa va takliflar.

Moliyaviy texnologiyalar, moliyaviy institutsiyalar va korxonalariga moliyaviy risklarni boshqarishda katta yordam beradi. Bu texnologiyalar tahlil qilish, monitoring qilish, ma'lumotlar analizi, avtomatlashtirilgan qaror qabul qilish va boshqa moliyaviy jarayonlarni boshqarish imkoniyatlarini ta'minlaydi. Quyidagi xulosa va takliflar moliyaviy texnologiyalardan foydalanishda muhimdir.

Moliyaviy texnologiyalar (fintech) orqali risklarni bartaraf etish uchun quyidagi usullarni kiritishingiz mumkin:

1. Avvalgi ma'lumotlar analiziga asoslangan tahminlardan foydalanish. Moliyaviy texnologiyalar ma'lumotlar analizini o'rganish va ma'lumotlar ustida tahminlar qilishga imkon beradi. Bu, potentsial risklarni avvaldan aniqlash va ularni oldini olishga yordam beradi.

2. Ma'lumotlar analitikasi va monitoring. Ma'lumotlar analitikasi va monitoring texnologiyalari yordamida tashkilotlar o'zlarining operatsiyalarini va tranzaksiyalarini tahlil qilishlari, anomalialarni aniqlashlari va potentsial risklarni oldini oladilar.

3. Avtomatlashtirilgan risk boshqarish. Avtomatlashtirilgan risk boshqarish vositalari yordamida, moliyaviy tashkilotlar risklarni avtomatik ravishda aniqlash, baholash va boshqarishlari mumkin bo'ladi. Bu, risklarga tezroq reaksiya ko'rsatish va zararlarini minimalizatsiya qilishga yordam beradi.

4. Qo'llab-quvvatlash tizimlari. Moliyaviy texnologiyalar orqali risklarni bartaraf etishda, kiber xavfsizlikni ta'minlash va ma'lumotlarni himoya qilish uchun kuchli qo'llab-quvvatlash tizimlaridan foydalanish juda muhimdir.

5. Tashqi taqdimotlar bilan ishbilarmonlik. Tashqi taqdimotlar va shaxsiy ma'lumotlarni himoya qilish xizmatlari bilan hamkorlik qilish orqali, moliyaviy tashkilotlar o'zlarining xavfsizlik tizimlarini kuchaytirish va risklarni kamaytirishlari mumkin.

6. Ma'lumotlarni himoyalash va shaxsiylik. Foydalanuvchilarning shaxsiy ma'lumotlarini himoya qilish, ma'lumotlarni shifrlash va ma'lumotlar etikasiga rioya qilish moliyaviy texnologiyalar orqali risklarni kamaytirishda muhim ahamiyatga ega.

7. Regulyatorlik va sharoitli rivojlanish. Moliyaviy texnologiyalar sohasida faoliyat ko'rsatayotgan tashkilotlar uchun, qonun hujjatlari va regulyatorlik talablariga rioya qilish zarur bo'ladi. Moliyaviy texnologiyalar sohasidagi yangiliklarga va o'zgarishlarga mos keluvchi rivojlanish strategiyalarini amalga oshirish muhimdir.

Moliyaviy texnologiyalar orqali moliyaviy risklarni bartaraf etish uchun quyidagi texnologiyalardan foydalanish mumkin:

➤ Ma'lumotlar analitikasi va ma'lumotlar modellash - bu texnologiyalar moliyaviy sohasidagi ma'lumotlarni tahlil qilish, tendentsiyalarni aniqlash va moliyaviy risklarni oldini olish uchun yordam beradi.

➤ Ma'lumotlar xavfsizligi. Moliyaviy ma'lumotlar xavfsizligi ko'p muhimdir. Shuningdek, blockchain texnologiyasi moliyaviy operatsiyalarni xavfsizlik va ishonchlik bilan bajarish imkonini yaratadi.

➤ Moliyaviy robotlar (Robo-advisors) - Robotlar moliyaviy maslahatchilik xizmatlarini taklif etish orqali investitsiyalar va moliyaviy qarzlarni boshqarishda yordam beradi.

➤ Biometrik tasdiqlash - Biometrik tasdiqlash texnologiyalari moliyaviy platformalarda ishonchli identifikatsiya va autentifikatsiya uchun ishlatiladi.

➤ Machine learning va AI - Sun'iy intellekt va mashina o'rganish texnologiyalari moliyaviy sohasida moliyaviy risklar va tartibotni boshqarishda yordam beradi.

Moliyaviy texnologiyalar, moliyaviy sohaning yanada rivojlantirilishiga va moliyaviy jarayonlarni yaxshilashga yordam beradi. Bu texnologiyalardan foydalanish, moliyaviy tizimlarning samaradorligini oshirish, moliyaviy

xizmatlar va mahsulotlarni yaxshilash, moliyaviy risklarni kamaytirish va mijozlarga yuqori sifatli xizmat ko'rsatishga yordam beradi.

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RESEARCH OF SOFT STARTING SYSTEMS OF AN INDUCTION MOTOR WITH AN INDUCTION RHEOSTAT IN FAN MECHANISMS

Annotation. This article provides information on the use and control of an adjustable asynchronous electric drive with an induction rheostat. Theoretical calculations and study of motor starting modes for various asynchronous electric drive schemes are presented.

Keywords. Adjustable electric drive, asynchronous motor, induction rheostat, control systems, speed control, control characteristics, mechanical characteristics.

Regulating the rotation speed of the electric drive of fan mechanisms is a rather complex electromechanical system, including elements (thyristors, IR, etc.) with different laws of parameter change. Satisfying certain requirements with an electric drive is associated with changing the parameters (usually electrical and mechanical) of these elements as a function of time, rotation speed and other regulatory parameters of the system. Therefore, the justified use of an adjustable electric drive requires studying its operation not only in stationary modes, but also in dynamic ones.

Start-up processes are integral elements of the operating cycle of any electric drive. To take into account the influence of start-up processes on the operating mode of the production mechanism, it is necessary to know their duration and the nature of their occurrence.

One of the options for the starting circuit is a fairly simple circuit with a frequency-dependent induction rheostat (IR) connected to the rotor circuit [1-8]. An induction rheostat (IR) is a three-phase a device consisting of a massive magnetic circuit and phase windings. There are different designs of the magnetic circuit of induction resistances operating in starting mode at a rotor current frequency of 50 to 4-5 Hz, with the most common design containing three hollow tubular rods connected by a yoke. Due to the surface effect that determines electromagnetic processes in massive ferromagnetic bodies, the wall thickness of the tubular magnetic circuit is about 10 mm [1-4]. The winding is located on tubular rods and is usually single-layer. The principle of induction resistance is based on the phenomenon of absorption of electromagnetic energy by a massive magnetic circuit and its conversion into thermal energy. The higher the frequency of the current flowing through the windings of the IR, the higher the power absorbed by the magnetic circuit, which determines the electrical parameters of the induction resistance. The nature of the change in frequency and current magnitude in the IR windings determines the value of the complex active-

inductive resistance of this device and affects the characteristics of the electric motor [9-11].

The starting characteristics of an electric drive are closely related to their operating characteristics. In the developed electric drives, with increasing resistance IR, the starting current decreases to the value $I_{\pi} = I_{\pi}(n)$ and at the same time the starting torque $M_{\pi}(n)$ increases compared to the rated torque $M_{\pi}(n)$ to a certain value $[r']_{\pi}(c); [x']_{\pi}(c)$. The next increase in $[r']_{\pi}(c); [x']_{\pi}(c)$ leads to a decrease in $M_{\pi}(n)$ compared to $M_{\pi}(n)$, but does not play an important role during startup pneumatic conveyor, because the nature of the load: $M_{\pi}(C) \propto n^2$.

With thyristor-induction-rheostat control of the electric drive of a pneumatic conveyor, of particular practical interest is the determination of starting characteristics for the cases: переменных U , фиксированных $r'_{\pi}; x'_{\pi}$;

variables $[r']_{\pi}; [x']_{\pi}$, fixed U ;

variables $[r']_{\pi}; [x']_{\pi}$, $[r']_{\pi}; [x']_{\pi}$.

In the first case, on the stator side, the voltage is regulated using a thyristor regulator at certain values of the IR resistance in the rotor circuit. As U decreases, the starting current of the motor also decreases, since in this case

$$I_{\pi} = U / \sqrt{(r_1 + [r']_{\pi})^2 + (x_1 + [x']_{\pi})^2} \quad (1.1)$$

For this case we obtain the expression for the starting torque

$$M_{\pi} = (m_1) U^2 ([r']_{\pi}) / (\omega_o [(r_1 + [r']_{\pi})^2 + (x_1 + [x']_{\pi})^2]) \quad (1.2)$$

Let us consider the case of determining the starting characteristics for the value of the thyristor control angle α at constant values of the active and inductive resistance of the rotor. In Fig. 1.1. the dependences $I_{\pi}(\alpha), M_{\pi}(\alpha)$ are shown. Solid lines indicate cases for $\delta = 0$, and dotted lines indicate cases for $\delta = 2$.

It is clear from the curves that by increasing or decreasing the angle α in the range $0 \leq \alpha \leq 180^\circ$, you can smoothly adjust the values of starting currents and torques from maximum to zero, i.e. By changing α you can smoothly start and stop the engine.

In the second case, the resistance IR is adjusted in the rotor circuit. The values of starting current $I_{\pi}(\alpha)$ and starting torque $M_{\pi}(\alpha)$ are determined by formula 1.1 and 1.2.

The best starting characteristics are obtained by reducing the voltage at the stator terminals and at the same time increasing the IR resistance in the wound rotor circuit. In Fig. 1.3. a;b the dependences of the starting torque and starting currents are given for various U_d and $\delta(2)$.

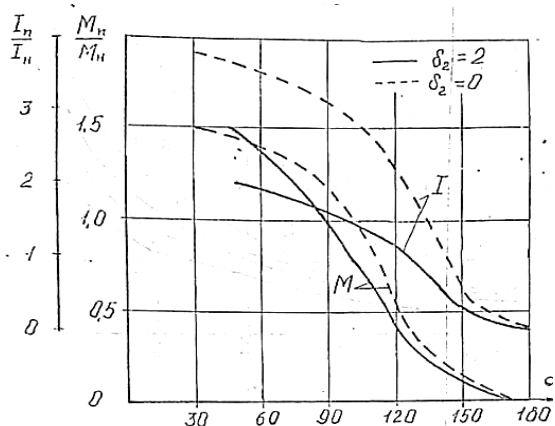


Рис. 1.1

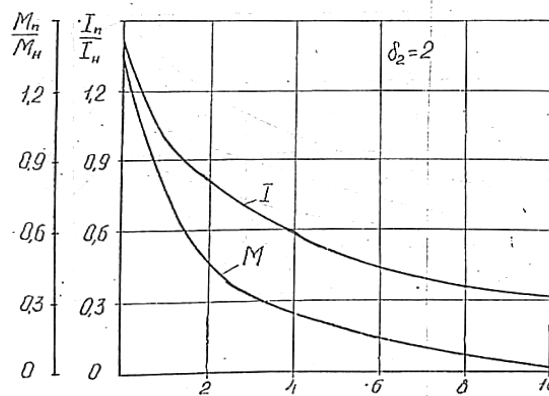
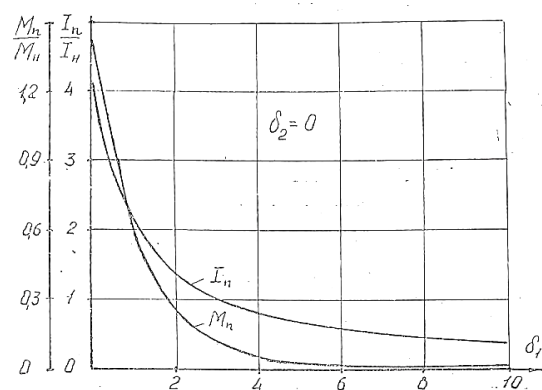
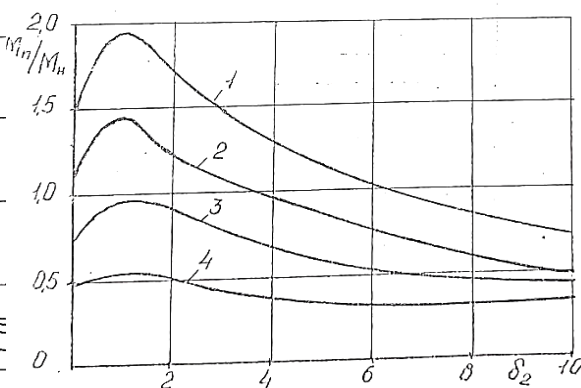
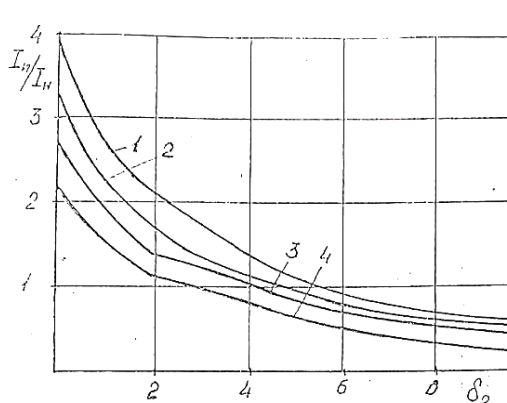
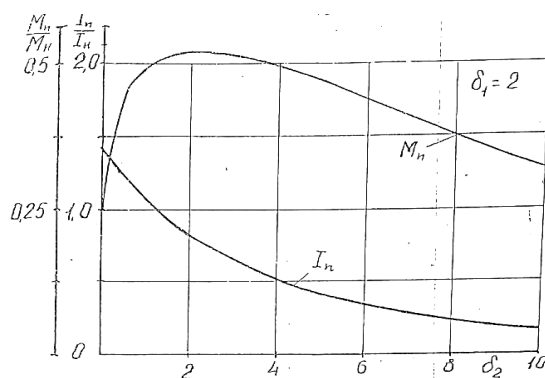


Рис. 1.2



a)



b)

picture.1.4

In picture. 1.2. the dependences of the starting torque and starting currents are given at $\delta_1=0...10$; $\delta_2=2$

As you can see, when changing $[[r^{\wedge}]]_{irs}$, $[[x^{\wedge}]]_{(irs)}$ with the help of thyristors for different resistances of the stator circuit, it becomes possible to regulate the starting torques of the engine. Maximum increase in $M_{(p)}$ and $I_{(p)}$ at $\delta_1=0$; $\delta_2=0$.

The curves show that optimal values of $[[r^{\wedge}]]_{irr}$ remain in the rotor chain; $[[x^{\wedge}]]_{irr} = \text{const}$ and using a thyristor controller by changing the values

of ω_{irs} ; ω_{irs} you can adjust the values of $M(p)$ and $I(p)$ in a wide range.

In Fig. 1.4 a; b; the dependences $M(\pi)$ and $I(\pi)$ are shown for different values of $\delta(1)$ [; $\delta(2)$]. From the curves it is clear that from $\delta(1)$ [and $\delta(2)$] the starting current and starting torque are regulated in a wide range. In this case, a non-contact method ensures a smooth start, but, however, the method leads to complication of the electrical circuits of the electric drive.

The paper discusses the implementation of a soft start of an asynchronous electric drive with an induction rheostat connected to the rotor circuit. Which makes it possible to limit the starting current at the moment of starting, and as a result, control the starting torque of the electric motor. Smooth acceleration with a given starting torque is ensured. However, for electric drive systems that require speed control, an induction rheostat is more suitable as a frequency-parametric device.

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*Samatov R.G., PhD
Toshkent Davlat Transport Universiteti Dotsenti
Shukurov Sh.A.
Toshkent Davlat Transport Universiteti Magistranti*

TRANSPORT VOSITALARINING VAZNINI AVTOMATIK NAZORAT STATSIONAR PUNKTI

Annotatsiya. Ushbu maqolada davlat chegaralari orqali o'tkazish punktlarida va O'zbekiston Respublikasining avtomobil yo'llari xorijiy va milliy transport vositalarining vazn va xajm parametrlari nazoratining asosiy maqsadi transport vositalarining avtomobil yo'llari va yo'l inshootlarining tamirlararo muddatlarigacha buzilishining oldini olish hamda yo'l xarakati xavfsizligini kuchaytirishni taminlashdan ibotat.

Kalit so'zlar: Suniy inshootlar, transport vositalari, transport ekspulatatatsiyasi, transport kompleksi, rekonstruksiya, statsionar punktlar.

*Samatov R.G., Ph.D
associate professor
Tashkent State University of Transport
Shukurov Sh.A.
master's student
Tashkent State University of Transport*

STATIONARY POINT OF AUTOMATIC WEIGHT CONTROL OF TRANSPORTATION VEHICLES

Abstract. In this article, the main purpose of the control of weight and volume parameters of foreign and national vehicles at the points of transfer through state borders and highways of the Republic of Uzbekistan is to prevent the damage of vehicles to highways and road structures up to the inter-railway period and road consists of ensuring the strengthening of the security of movement.

Key words: Artificial constructions, vehicles, transport exploitation, transport complex, reconstruction, stationary points.

Yo'l harakati xavfsizligini avtomobiy yo'llari va suniy inshootlarning saqlanishi taminlash maqsadida katta hajmli va og'ir vazmli transport vositalari xarakatlanishi yo'nalishini tanlashda avtomobil yo'llarining transport ekspulatatatsiya xolati va yuk ko'tarish qobiliyati taklif qilinayotgan qatnov yo'lidagi suniy inshootlarning yuk ko'tarish qobiliyati va parametrlarining baholanishi hamda yo'l harakati intinsivligi inobatga olinadi.

Aynan yuk va yo'lovchi tashishni tashkil etishda xavfsizlikni ta'minlash, shuningdek, yo'l tarmog'ini saqlash va yo'l harakati qatnashchilari uchun iqtisodiy qulay muhit yaratish.

O'zbekiston Respublikasida avtomobil yo'llari tarmog'ini saqlashga katta moddiy, moliyaviy va texnik resurslar sarflanmoqda. Og'ir avtomashinalar har yili davlat yo'llariga zarar yetkazadi, shuning uchun yo'l qoplamalarini tiklash uchun milliardlab so'm mablag' talab etiladi. Ushbu xarajatlardan foydalanish samaradorligini oshirish muammosi mamlakatni avtomobillashtirish jarayonini boshqarish, ya'ni butun transport kompleksini va uning alohida quyi tizimlarini, shu jumladan yo'l tarmog'ini rivojlantirish va takomillashtirish nuqtai nazaridan tobora muhim ahamiyat kasb etmoqda.

Jamiyatni avtomobillashtirish sur'atlaridan avtomobil yo'llari tarmog'ini rivojlantirishda sezilarli orqada qolish mavjud. Og'ir yuklarni tashish hajmi yuqori sur'atlarda o'sib bormoqda, bu esa, mos ravishda, O'zbekiston Respublikasi avtomobil yo'llari tarmog'idagi yuklarning oshishiga olib keladi. Avtotransport vositalarining yuk ko'tarish qobiliyatining o'sishi bilan bir tomondan, yuk tashish xarajatlari kamaysa, ikkinchi tomondan, yo'l tarmog'ini qurish, rekonstruksiya qilish va ta'mirlash xarajatlari ortib bormoqda.

Yo'lning qatnov qismi va yo'l chetlari yo'l qoplamasining eskirishi va buzilishiga ko'rsatkichlari ko'pchilik umumiy foydalanishdagi yo'llarda sezilarli o'sish tendentsiyasiga ega bo'lgan yuk tashuvchi transport vositalarining ruxsat etilgan o'qiga yuklanishi omili sezilarli ta'sir ko'rsatadi.

Shu bilan birga, qatnov qismi qoplamasining ekvivalent eskirish koeffitsienti o'qdagi yukga nisbatan 6 dan 10 tonnagacha 2,9 baravarga, 10 dan 13 tonnagacha esa 6 baravarga oshadi, bu esayo'llarning intensiv muddatidan oldin eskirishiga olib keladi. va ularni ta'mirlash uchun katta mablag' talab qiladi. Bundan tashqari, O'zbekiston Respublikasi hududining salmoqliqismida iqlim va ob-havo sharoitlarining o'ziga xosligi avtomobil yo'llarida har yili mavsumiy vaqtinchalik cheklovlar joriy etish zaruratini keltirib chiqarmoqda.

Hozirgi vaqtda O'zbekiston Respublikasida yuk tashuvchi transport vositalarini ko'rikdan o'tkazish imkonini beradigan va avtomobil yo'llariga yetkazilgan zararining o'rnini qoplash uchun mablag' undirilishi nazarda tutilmagan avtotransport vositalarining og'irlik va o'lchovlarini nazorat qilish tizimi mavjud emas. Yo'llarda og'ir yuk avtomobillarining harakatlanishi yo'l harakati xavfsizligini ta'minlash, barcha yo'l harakati qatnashchilarining qulay harakatlanishi uchun sharoit yaratish kabi dolzarb vazifalarni hal qilishni taqozo etadi. Yo'l qoplamalarining xizmat qilish muddatini qisqartirishning oldini olish va yo'l harakati xavfsizligini ta'minlash maqsadida qonunchilik va me'yoriy hujjatlar bilan belgilangan:

O'zbekiston Respublikasi Vazirlar Mahkamasining 2020-yil 28-maydagi "Transport vositalarining og'irlik va hajm parametrlari ustidan nazoratni joriy etish chora-tadbirlari to'g'risida"gi 337-son qarori;

O‘zbekiston Respublikasi Prezidentining 2022-yil 12-iyuldagi “2022-2026-yillarda amalga oshirilishi rejalashtirilgan “Xavfsiz va ravon yo‘l” umummilliy dasturini tasdiqlash to‘g‘risida”gi PQ-316-son qarori.Transport vositalarining og‘irligi va umumiy parametrlarini nazorat qilish va cheklash ko‘plab mamlakatlarda amalga oshirilmogda.

Bularning barchasi yuk tashuvchi transport vositalarining og‘irlik va o‘lchovlarini nazorat qilish tizimida ilmiy izlanishlar zarurligini ko‘rsatadi.

O‘zbekiston hududida avtomobil yo‘llari tarmog‘ini saqlash va avtomobil transportining xavfsiz harakatlanishini ta‘minlash, avtomobil yo‘llarining ta‘mirlararo muddatlargacha buzilishining oldini olish maqsadida Vazirlar Mahkamasi 28.05.2020 yilda «Transport vositalarining vazn va hajm parametrlarini nazorat qilishni joriy etish chora-tadbirlari to‘g‘risida»gi 337-son qarorni qabul qildi.Transport vositalarining vazn va hajm parametrlarini nazorat qilish tartibi to‘g‘risidagi nizom;

Katta hajmli va og‘ir vaznli transport vositalarining yo‘nalish bo‘yicha harakatlanishidan oldin avtomobil yo‘llarini o‘rganish tartibi to‘g‘risidagi nizom Transport vazirligi huzuridagi Avtomobil yo‘llari qo‘mitasi transport vositalarining vazn va hajm parametrlarini nazorat qilish punktlarini loyihalashtirish, qurish, ta‘mirlash, jihozlash maxsus texnika xarid qilish va saqlash bo‘yicha buyurtmachi hisoblanadi.

Moliyalashtirish Qo‘mita faoliyatini rivojlantirish va qo‘llab-quvvatlash jamg‘armasi mablag‘lari hamda qonun hujjatlarida taqiqlanmagan boshqa manbalar hisobidan amalga oshiriladi. Qo‘mita xalqaro amaliyotdan kelib chiqib xorijiy yuk avtotransport vositalarining respublika avtomobil yo‘llari bo‘ylab o‘tishi kilometrini yoki vaqtini hisob-kitob qilish tartibini belgilaydi. Shuningdek buning uchun haq undirish bo‘yicha texnik-iqtisodiy hisob-kitoblarni ishlab chiqadi.

Avtotransport vositalarining ruxsat etilgan massasi

Transport vositasi turi	Ko‘rsatkich (t)
Yakka avtotransport vositalari:	
ikki o‘qli	18
uch o‘qli	26
to‘rt o‘qli	32
Mingashmali va tirkamali avtopoyezdlar:	
uch o‘qli	28
to‘rt o‘qli	36
besh o‘qli	40
olti va undan ortiq o‘qli	44

Izoh: Avtotransport vositalarining o‘qlariga tushuvchi ruxsat etilgan og‘irligi avtotransport vositalarining umumiy ruxsat etilgan massasiga rioya qilinganda yakka yetakchi o‘qqa tushuvchi og‘irlik 11,5 tonnadan, boshqa o‘qlarga esa 10 tonnadan ortiq bo‘lmasligi kerak.

Me'yoriy og'irlik o'lchamlari

Ko'prikka tushuvchi og'irlikning hisob tizimi	Me'yoriy og'irlik	
	Umumiy haqiqiy vazn, tn.	Minimal baza, metr
N 8 va NG-30	10,5 dan ortiq emas	4
N10 va NG-60	13,0 dan ortiq emas	4
N13 va NG-60	17,0 dan ortiq emas	4
N18 va NK-80	30,0 dan ortiq emas	6,8
N30 va NK-80	30,0 dan ortiq emas	6,8

Izoh: NG — (zanjirli og'irlik).

NK — (g'ildirakli og'irlik).

Katta hajmli va og'ir vaznli yuklarni avtomobil transportida tashishda harakat xavfsizligini ta'minlash qoidalariga

Me'yordan yuqori bo'lgan og'irlik o'lchamlari

Ko'prikka tushuvchi og'irlikning hisob tizimi	Me'yordan yuqori bo'lgan og'irlik		
	Umumiy haqiqiy vazn, t.k.	O'qqa tushuvchi og'irlik, tn.	Baza, metr
N 8 va NG-30	30 dan ortiq emas	7,6 dan ortiq	4 dan kam
N10 va NG-60	60 dan ortiq emas	9,5-13	5
N13 va NG-60	60 dan ortiq emas	16	5
N18 va NK-80	80 dan ortiq emas	20	3,6
N30 va NK-80	80 dan ortiq emas	20	3,6

Katta hajmli va og'ir vaznli yuklarni avtomobil transportida tashishda harakat xavfsizligini ta'minlash qoidalariga

Uzun o'lchamli transport vositasi belgisi

Ortiqcha yuklangan yuk mashinalari muammosini ko'rib chiqish va tahlil qilish va xorijiy mamlakatlarning vazni va o'lchamlari nazorati



Yuk mashinalari tarozilarini avtomatlashtirish asta-sekin katta transport oqimiga ega bo'lgan yirik korxonalarining vakolati bo'lishni to'xtatadi va kichik va

o'rta sanoatda tobora ko'proq foydalanilmoqda. Bunday texnik echimlarning o'ziga xos xususiyati shundaki, ular avtomatlashtirilgan boshqaruv tizimlari, video kuzatuv, axborot tizimlari va kirishni boshqarish tizimlari texnologiyalari kesishgan joyda joylashganligi sababli, hatto tajribali muhandis uchun ham bunday vazifani bajarish oson emas. Shu sababli, ushbu maqolada men tarozilarni avtomatlashtirish bo'yicha texnik echimlarni ishlab chiqishning umumiy metodologiyasi, shuningdek, bunday loyihalarni amalga oshirishning ayrim jihatlari bilan bo'lishmoqchiman. Bu yuk avtomobillari tarozida tortish jarayonini optimallashtirish vazifasi turgan korxonalar mutaxassislariga ushbu vazifaga yanada tizimli va kompleks yondashishga yordam beradi.

Quyidagi muammolarni oldini olish uchun avtomobil tarozi tortish tartibi:

➤ imkoniyatlar va'da qilish oshi- tomoni operator tarozilar, ayniqsa tarozi ko'rsatkichlarini yozib olishda "ostida qalam";

➤ imkoniyatlar suiiste'mol qilish jo'natish paytida xodimlardan ke yoki qabul qilish yuk;

➤ hujjatlarning etishmasligi tortish jarayonining raqamli shaklida tikuvchilik va, natijada, murakkab Yangiliklar ma'lumotnoma talab ish bilan kontragentlar;

➤ jarayon uchun ortiqcha mehnat xarajatlari yuklar yoki qabul qilish tovarlar;

➤ o'tkazish qobiliyatining etarli emasligi xususiyatlari tarozilar, nima xarakterli uchun mavsum bilan bog'liq korxonalar - sikllar (qishloq xo'jaligi Va boshqalar);

➤ tartibsiz jarayon harakat - zheniya transport orqali tarozilar.

➤ Shuningdek bildirmoq holatlar, Qachon avtomatlashtirish tarozilar yoki ortiqcha

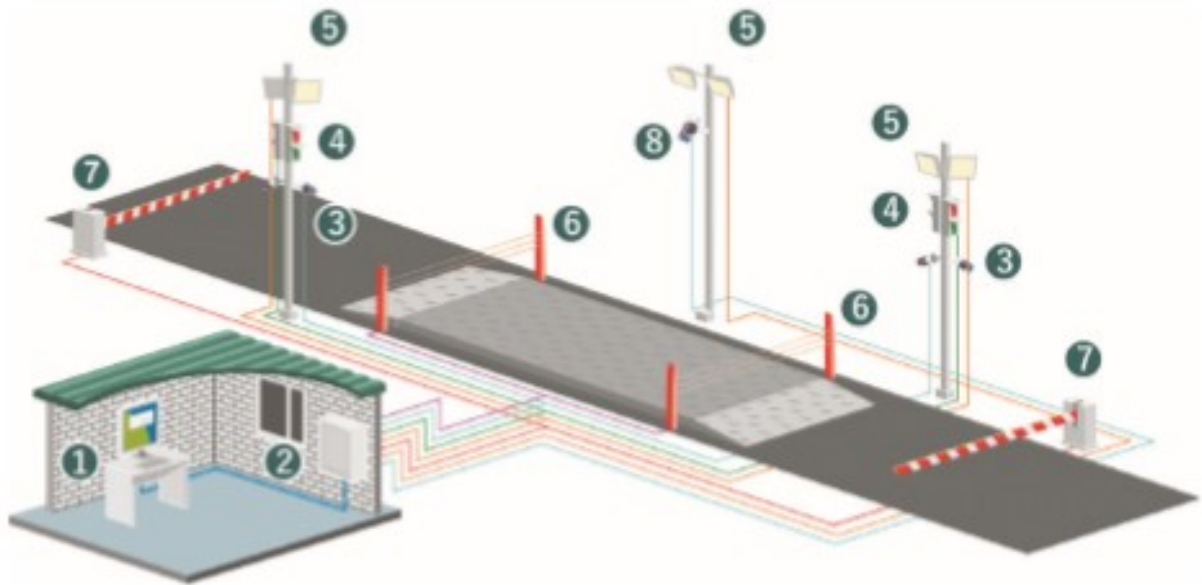
➤ ustida, yoki oz amal qiladi:

orqali tarozilar ketadi Juda kichik qatnov avtomobillar;

ahamiyatsiz narx oshitomoni operator;

➤ tarozilar portativ (pastki qatlam) yoki eksenel statik.

Shunday qilib, transpotrlarni vaznini va hajm parametrlarini nazorat qilish quyidagi statsionar punkt yordamida amalga oshirilishi mumkin,



1-rasm: “Automarshall Weigh” tizimidan foydalangan holda vazn nazorat qilish uchastkasining diagrammasiga misol: 1 - “Automarshall.Weigh” dasturiga ega kompyuter; 2 - “Avtomarshal Weigh” operator xonasi; 3- tanib oluvchi videokameralar; 4 - svetofor; 5 - LED yoritgichlar; 6 - tarozida transport vositasining holatini kuzatish uchun sensorlar; 7 - to'siqlar; 8 - avtomobil kuzovidagi videokamera.

Vazn va hajm parametrlari nazorati punktlari uch xil bo‘ladi: statsionar; ko‘chma; avtomatlashtirilgan (foto va video suratga olish funksiyalariga ega avtomatlashtirilgan tarzda ishlovchi maxsus vositalardan foydalanuvchi nazorat punkti).

Xulosa: Vazn va hajm parametrlari nazoratining asosiy maqsadi transport vositalarining avtomobil yo‘llari va yo‘l inshootlarining ta‘mirlararo muddatlarigacha buzilishining oldini olish hamda yo‘l harakati xavfsizligini kuchaytirishni ta‘minlashdan iborat.

Haydovchilarning nazorat punktida yo‘qolgan vaqti tekshiruv uchun kelgan og‘ir transport vositalarining hajmiga bog‘liq. U qanchalik katta bo‘lsa, stantsiya bo‘sh bo‘lmagan vaqt davomida yo‘qotilgan vaqt shunchalik yuqori bo‘ladi. Ba‘zan, transport vositasi ruxsat etilgan tashish qobiliyatiga qarab yuklangan bo‘lsa ham, o‘qdagi yuk qonuniy chegaradan oshib ketdi. Nizomning ijrosini ta‘minlashda nazorat punktlarining samaradorligi minimal edi, bu mas‘ul inspektorning shaxsiy fikriga bog‘liq edi (ortiqcha yukni nazorat qilish bardoshliligi doimiy emas, u inspektordan inspektorga farq qiladi, hatto reglament hech qanday tolerantlikka yo‘l qo‘ymasa ham).

Foydalanilgan adabiyotlar:

1.O‘zbekiston Respublikasi Vazirlar Mahkamasining 2020-yil maydagi “Transport vositalarining og‘irlik va hajm parametrlari ustidan nazoratni joriy etish chora-tadbirlari to‘g‘risida”gi 337-son qarori;

2. O'zbekiston Respublikasi Prezidentining 2022-yil 12-iyuldagi "2022-2026-yillarda amalga oshirilishi rejalashtirilgan "Xavfsiz va ravon yo'l" umummilliy dasturini tasdiqlash to'g'risida"gi PQ-316-son qarori.

3. O'zbekiston Respublikasi Prezidentining 2022-yil 2-fevraldagi Toshkent shahri jamoat transporti tizimini yanada rivojlantirishga doir qo'shimcha choratadbirlar to'g'risidagi PQ-111-sonli Farmoni.

<https://upl.uz/president/31398-news.htm>

<https://www.gazeta.uz/ru/2022/11/26/tashkent-transport-system/>

<https://hook.report/2022/04/probki>

https://hugepdf.com/download/5afdeeb82d3c4_pdf

*Samatov R.G., PhD
Toshkent Davlat Transport Universiteti Dotsenti
Shukurov Sh.A.
Toshkent Davlat Transport Universiteti Magistranti*

AVTOMOBIL OG'IRLIGINI ANIQLASH USKUNALARI TA'RIFI VA ISHLASH PRINSPI

Annotatsiya. Transport vositalari va ularning yuklarini tortish uchun mo'ljallangan maxsus jihozlar. Ular yuk mashinalari va boshqa transport vositalarining og'irligini maksimal ruxsat etilgan og'irlik qoidalariga rioya qilinishini ta'minlash, shuningdek, tashish xarajatlarini hisoblash, tashilgan material miqdorini aniqlash va ortiqcha yuk tufayli yo'l sirtining buzilishini oldini olish uchun ishlatiladi.

Kalit so'zlar: Suniy inshootlar, transport vositalari, Tenzometr, Masshtabli dizaynlar, statsionar punktlar, raqamli va analog deformatsiya.

*Samatov R.G., Ph.D
associate professor
Tashkent State University of Transport
Shukurov Sh.A.
master's student
Tashkent State University of Transport*

DESCRIPTION AND PRINCIPLE OF OPERATION OF VEHICLE WEIGHT DETERMINATION EQUIPMENT

Abstract. Special equipment for weighing transport and court cargo. They ensure that the weight of trucks and other vehicles comply with the rules of the maximum permissible weight, load products, pay for cleaning, clean the road surface due to air freight to clean the transported material.

Key words: Artificial structures, vehicles, Tensometer, Scale designs, stationary points, digital and analog deformation.

Avtomobil transporti qo'llaniladigan deyarli har qanday korxonada yukning massasini aniqlash zarurati mavjud. Hozirgi vaqtda massani aniqlashning yagona ishonchli usuli bu tortishdir.

Yuk mashinalari tarozilarining turlari haqida gapirganda, biz bir nechta narsalarni anglatishimiz mumkin:

➤ Yuk mashinasi tarozilarini o'rnatish usullari: poydevor, chuqurda, poydevorsiz

➤ Tarozilarning maqsadi

➤ Masshtabli dizaynlar

➤ Tarozi turi bo'yicha: elektron yoki mexanik

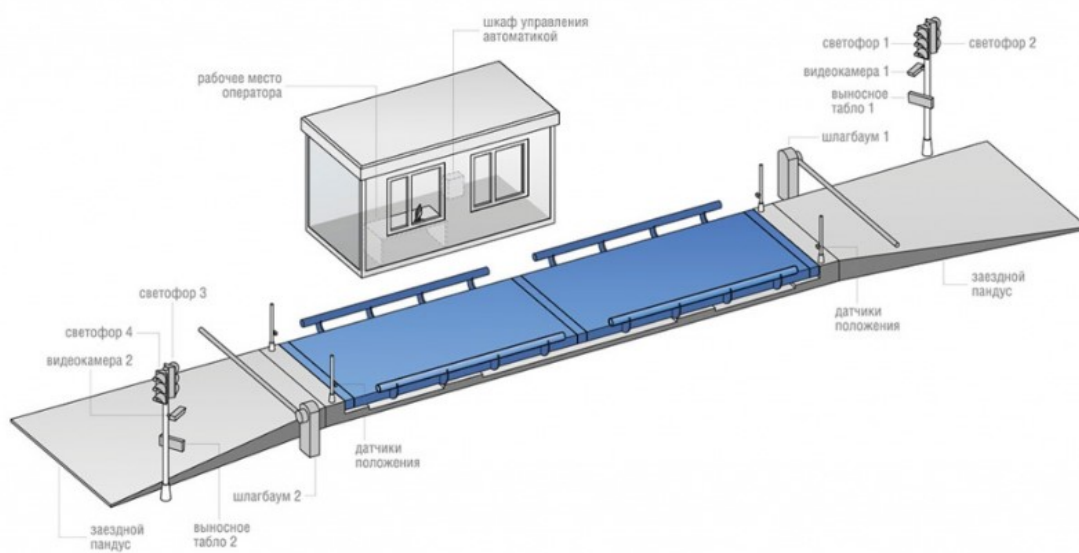
Yuk mashinalari tarozilari ishlab chiqarish va transport jarayonlarini boshqarish va nazorat qilishning asosiy elementidir. Ular nafaqat aniq o'lchovlarni ta'minlaydi, balki butun korxonada faoliyatini optimallashtirishga yordam beradi.

Yuk mashinalari tarozilari qayerda ishlatiladi?

Yuk mashinalari tarozilari faoliyatning turli sohalarida o'z qo'llanilishini topadi. Katta massalarni aniq tortish qobiliyati va buxgalteriya hisobi va nazorat qilish tizimlari bilan integratsiyalashuvi tufayli ular sanoat, qishloq xo'jaligi, savdo va qurilishda ajralmas vositaga aylandi. Bunday uskunadan foydalanish nafaqat tashilgan yuklarning massasini qayd etish imkonini beradi, balki ma'lumotlarni yig'ish, qayta ishlash va tahlil qilish jarayonini ham soddalashtiradi. Ixtisoslashgan ma'lumotlar bazalarini yaratish, hisobot shakllarini tayyorlash va ularni chop etish mahsulotning hisobini va inventarizatsiyasini boshqarishni sezilarli darajada osonlashtiradi, bu esa korxonaning umumiy unumdorligi va samaradorligini oshirishga yordam beradi.

Dizayn xususiyatlari

Avtotransport vositalarining statik tarozilarining dizayn xususiyatlari ularning o'ziga xos qo'llanilishi va o'lchov aniqligiga qo'yiladigan talablar bilan belgilanadi. Bu tarozilar tenzometrlarga o'rnatilgan yuk qabul qiluvchi platformadan iborat bo'lib, bu yuk mashinalarining og'irligini aniq aniqlash imkonini beradi. Keling, ushbu tarozilarning asosiy tarkibiy qismlari va dizaynini batafsil ko'rib chiqaylik.



1-shakl. Yuk mashinasi tarozilarining sxematik diagrammasi

Yukni qabul qilish platformasi

Yuk mashinalari tarozilarining asosiy elementi yukni qabul qilish platformasi bo'lib, u bitta qattiq konstruktsiya yoki ikkita yarim platforma shaklida tayyorlanishi mumkin. Trek tipidagi shkaladan foydalanilganda,

platforma ikkita alohida yo'ldan iborat bo'lib, ishlatiladigan metall miqdorini kamaytiradi va dizaynni soddalashtiradi. Yarim platformalar modulli bo'lishi mumkin, bir nechta elementlardan iborat bo'lishi mumkin, ularning har biri o'z deformatsiya o'lchagichlar guruhi tomonidan quvvatlanadi. Bu tarozilarning konfiguratsiyasida moslashuvchanlikni ta'minlaydi va ularni tashish va o'rnatishni osonlashtiradi.

O'rnatish va ulash

Yuk mashinasi tarozilarini o'rnatish uchun beton yo'l plitalariga yoki mustahkam poydevorga birlashtirilishi mumkin bo'lgan o'rnatish ramkasi ishlatiladi. Ramka strukturaning barqarorligini va uning xavfsiz joylashishini ta'minlaydi. Yukni qabul qiluvchi platforma modullarini o'rnatish chegara murvatlari yordamida amalga oshiriladi, bu ham platformaning bo'ylama siljishini oldini olishga xizmat qiladi.

Opsiyonel uskunalar

Yuk mashinalari tarozilari uchun qo'shimcha jihozlar platformaga kirish uchun rampalarni, shafqatsiz modellar va to'siqlar uchun markaziy polni o'z ichiga oladi. Ushbu elementlar tarozilar bilan to'liq ta'minlanishi yoki alohida o'rnatilishi mumkin. Ular tarozidan foydalanishni soddalashtiradi va tortish paytida xavfsizlikni oshiradi.

Shunday qilib, statik tortish tarozilarining dizayni transport vositalarining massasini aniq o'lchashga qodir bo'lgan murakkab va moslashuvchan tizimdir. Bu faoliyatning turli sohalari ehtiyojlarini qondiradigan yuqori ishonchlilik va chidamlilikni ta'minlaydi.

Ishlash printsipi

Avtotransport vositalarining statik tortish tarozilarining ishlash printsipi massa o'lchash jarayonida asosiy elementlar bo'lgan deformatsiya o'lchagichlardan foydalanishga asoslangan. Ushbu qurilmalar avtomobilning og'irligi bilan hosil bo'lgan jismoniy bosimni elektr signaliga aylantiradi. Ushbu jarayon yuqori tortish aniqligini ta'minlaydi va tashilgan yukning og'irligi haqida ishonchli ma'lumotlarni taqdim etadi.

Tenzometr tarozilarining ishlash printsipi

Tenzometrli avtomashinalar tarozilari yuk qabul qilish platformasi ostida o'rnatilgan bir qator tenzometrlar (odatda 4 dan 12 gacha) bilan jihozlangan. Ushbu sensorlar avtomobilning og'irligini oladi va aloqa qutisiga signal uzatadi. Analog tizimlarda barcha yuk xujayralarining signallari ushbu qutiga yig'iladi, shundan so'ng umumiy signal tortish terminaliga uzatiladi. Terminal qabul qilingan ma'lumotlarni qayta ishlaydi va yukning og'irligini ko'rsatadi.

Raqamli va analog deformatsiya o'lchagichlarning xususiyatlari

Shuni ta'kidlash kerakki, raqamli yuk hujayralaridan foydalanganda ma'lumotlarni uzatish jarayoni boshqacha. Bunday tizimlarda signal ulanish qutisida dastlabki yig'indisiz to'g'ridan-to'g'ri terminalga uzatiladi. Bu yuqori o'lchov aniqligini ta'minlaydi va butun tizimning tuzilishini soddalashtiradi.

Birlashma qutisining roli

Birlashma qutisi o'lchov jarayonida muhim rol o'ynaydi, ayniqsa, yuk xujayrasi ko'rsatkichlaridagi nomuvofiqliklar yuk plitasining siljishi yoki sensorning chiqish parametrlaridagi farqlar tufayli yuzaga kelsa. Bunday hollarda quti signal darajasini sozlash va tekislash imkonini beradi, bu esa aniq o'lchovlarni ta'minlaydi.

Statik tortish avtomobil tarozilarining ishlash printsipi mexanik bosimni kuchlanish o'lchagichlar yordamida elektr signaliga aylantirishga asoslangan. Bu avtomobil og'irligi va uning yukini aniq o'lchash imkonini beradi.

O'rnatish usuli bo'yicha yuk mashinalari tarozilarining turlari

O'rnatish usullarini maqolada batafsil muhokama qildik yuk mashinalari tarozilarini o'rnatish imkoniyatlari. Yuk mashinasi tarozilari poydevor va poydevorsiz bo'linadi.

Birinchi turdagi tarozilar uchun, nomidan ko'rinib turibdiki, beton poydevor talab qilinadi. Ushbu parametr tarozilarni bir marta va uzoq vaqt davomida (10-15-20 yil va boshqalar) o'rnatadigan kompaniyalar uchun javob beradi. Poydevor er ustida yoki chuqurda bo'lishi mumkin.

Poydevorsiz yuk mashinalari tarozilari bilan, nomiga qaramay, hamma narsa juda oddiy emas. Metrologiyani kafolatlash uchun tekis, qattiq sirt kerak. Bu holda uskunani o'rnatishning eng keng tarqalgan varianti yo'l plitalarida. Vaqt o'tishi bilan ish joylarini o'zgartiradigan kompaniyalar uchun bu variant afzalroqdir, masalan, quruvchilar, qurilishni tugatgandan so'ng, tarozilarni yangi loyihaga ko'chirish, yo'lchilar yo'l qurilishining borishiga qarab tarozilarni ko'chirish. Bunday hollarda to'liq poydevorni qurish vaqt va pul uchun juda qimmatga tushadi. Plitalar yangi joyda qayta ishlatilishi mumkin.

Ba'zi ishlab chiqaruvchilar to'g'ridan-to'g'ri erga joylashtirilgan tarozilarni taklif qilishadi. Buning uchun ishlab chiqaruvchilar deformatsiya o'lchagichlardan yukni ko'taradigan maxsus ramkadan foydalanadilar. Biroq, bu variantni uzoq vaqt davomida ishonchli deb atash qiyin - tuproq etarlicha qattiq asos emas va vaqt o'tishi bilan cho'kishi mumkin va shu bilan shkala ko'rsatkichlarini buzishi mumkin.



2-shakl. Avtomobil tarozilari turlari.

Yukni qabul qilish platformasi

Yuk mashinalari tarozilarining asosiy elementi yukni qabul qilish platformasi bo'lib, u bitta qattiq konstruktsiya yoki ikkita yarim platforma shaklida tayyorlanishi mumkin. Trek tipidagi shkaladan foydalanilganda, platforma ikkita alohida yo'ldan iborat bo'lib, ishlatiladigan metall miqdorini kamaytiradi va dizaynni soddalashtiradi. Yarim platformalar modulli bo'lishi mumkin, bir nechta elementlardan iborat bo'lishi mumkin, ularning har biri o'z deformatsiya o'lchagichlar guruhi tomonidan quvvatlanadi. Bu tarozilarning konfiguratsiyasida moslashuvchanlikni ta'minlaydi va ularni tashish va o'rnatishni osonlashtiradi.



3-shakl. Mobil va statsionar og'irlik va o'lchamlarni nazorat qilish postlari

Tortish terminali

Tarozilarning o'lchash tizimining asosini platforma ostida o'rnatilgan tenzometrlar tashkil qiladi. Ular yukni transport vositasining og'irligidan sezadilar va uni elektr signaliga aylantiradilar, bu esa tortish terminaliga uzatiladi. Taroz terminali bu signalni qayta ishlaydi va yukning og'irligini ko'rsatadi. Deformatsiya o'lchagichni va terminal modelini tanlash ishlab chiqaruvchiga va o'lchov uchun maxsus talablarga bog'liq.

O'rnatish va ulash

Yuk mashinasi tarozilarini o'rnatish uchun beton yo'l plitalariga yoki mustahkam poydevorga biriktirilishi mumkin bo'lgan o'rnatish ramkasi ishlatiladi. Ramka strukturaning barqarorligini va uning xavfsiz joylashishini ta'minlaydi. Yukni qabul qiluvchi platforma modullarini o'rnatish chegara murvatlari yordamida amalga oshiriladi, bu ham platformaning bo'ylama siljishini oldini olishga xizmat qiladi.

Opsiyonel uskunalar

Yuk mashinalari tarozilari uchun qo'shimcha jihozlar platformaga kirish uchun rampalarni, shafqatsiz modellar uchun markaziy taxta va to'siqlarni o'z ichiga oladi. Ushbu elementlar tarozilar bilan to'liq ta'minlanishi yoki alohida o'rnatilishi mumkin. Ular tarozidan foydalanishni soddalashtiradi va tortish paytida xavfsizlikni oshiradi.

Statik tortish tarozilarining dizayni transport vositalarining massasini aniq o'lchashga qodir bo'lgan murakkab va moslashuvchan tizimdir. Bu faoliyatning turli sohalari ehtiyojlarini qondiradigan yuqori ishonchlilik va chidamlilikni ta'minlaydi.



4-shakl. Avtomatik og'irlik va o'lchamlarni nazorat qilish nuqtasi

Ishlash printsiipi

Avtotransport vositalarining statik tortish tarozilarining ishlash printsiipi massa o'lchash jarayonida asosiy elementlar bo'lgan deformatsiya

o'lchagichlardan foydalanishga asoslangan. Ushbu qurilmalar avtomobilning og'irligi bilan hosil bo'lgan jismoniy bosimni elektr signaliga aylantiradi. Ushbu jarayon yuqori tortish aniqligini ta'minlaydi va tashilgan yukning og'irligi haqida ishonchli ma'lumotlarni taqdim etadi.

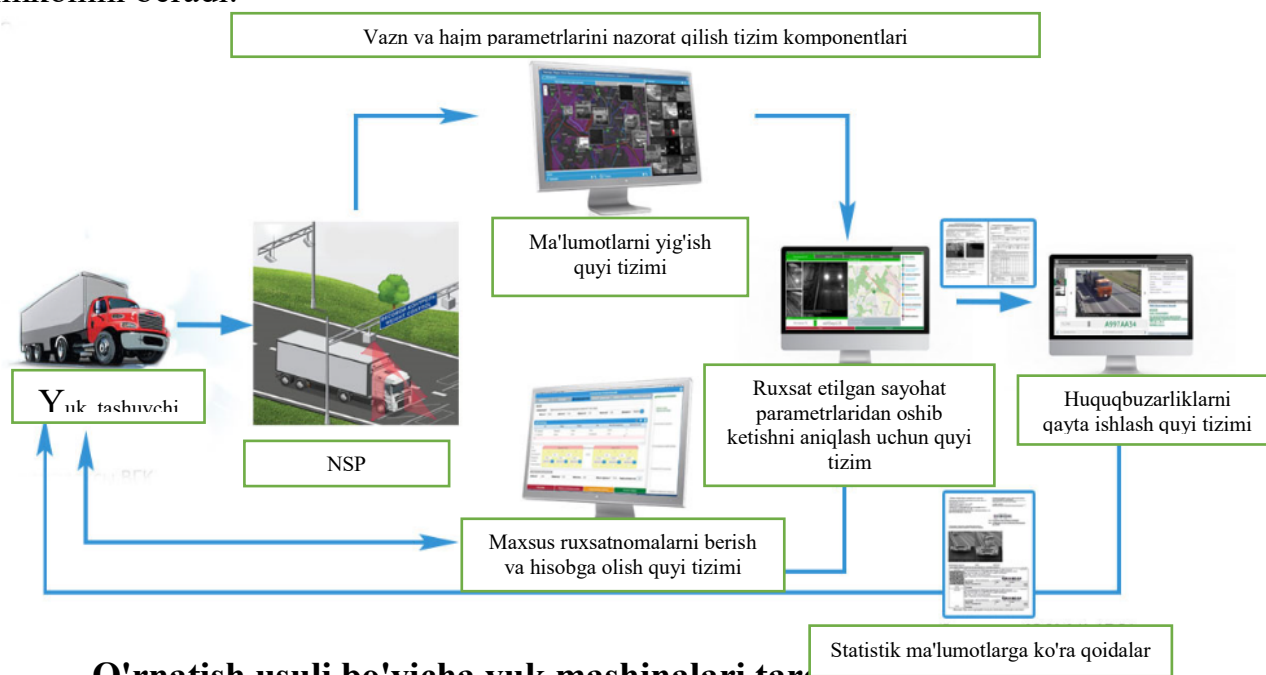
Raqamli va analog deformatsiya o'lchagichlarning xususiyatlari

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Birlashma qutisining roli

Birlashma qutisi o'lchov jarayonida muhim rol o'ynaydi, ayniqsa, yuk xujayrasi ko'rsatkichlaridagi nomuvofiqliklar yuk plitasining siljishi yoki sensorning chiqish parametrlaridagi farqlar tufayli yuzaga kelsa. Bunday hollarda quti signal darajasini sozlash va tekislash imkonini beradi, bu esa aniq o'lchovlarni ta'minlaydi.

Shunday qilib, statik tortish avtomobil tarozilarining ishlash printsipti mexanik bosimni kuchlanish o'lchagichlar yordamida elektr signaliga aylantirishga asoslangan. Bu avtomobil og'irligi va uning yukini aniq o'lchash imkonini beradi.



O'rnatish usuli bo'yicha yuk mashinalari tarozilarining turatlari.

O'rnatish usullarini maqolada batafsil muhokama qildik yuk mashinalari tarozilarini o'rnatish imkoniyatlari. Yuk mashinasi tarozilari po'ydevor va po'ydevorsiz bo'linadi.

Birinchi turdagi tarozilar uchun, nomidan ko'rinib turibdiki, beton po'ydevor talab qilinadi. Ushbu parametr tarozilarni bir marta va uzoq vaqt davomida (10-15-20 yil va boshqalar) o'rnatadigan kompaniyalar uchun javob beradi. Po'ydevor er ustida yoki chuqurda bo'lishi mumkin.

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Ba'zi ishlab chiqaruvchilar to'g'ridan-to'g'ri erga joylashtirilgan tarozilarni taklif qilishadi. Buning uchun ishlab chiqaruvchilar deformatsiya o'lchagichlardan yukni ko'taradigan maxsus ramkadan foydalanadilar. Biroq, bu variantni uzoq vaqt davomida ishonchli deb atash qiyin - tuproq etarlicha qattiq asos emas va vaqt o'tishi bilan cho'kishi mumkin va shu bilan shkala ko'rsatkichlarini buzishi mumkin.

Tarozilarning tortish tamoyiliga asoslangan turlari

Mexanik tarozilarni ishlab chiqarmasligiga qaramay (lekin bu aniq emas), ba'zi korxonalar hali ham bunday agregatlardan foydalanadilar.

Ishlash printsipti - tutqichlar va qarshi og'irliklar tizimi. Dizayn ishonchli - ishlab chiqarilgan kundan boshlab 30 va 40 yil o'tgach, bunday tarozilarni topish hali ham oson. Biroq, hozirgi vaqtda ushbu uskunaning ahamiyati yo'q - uni o'rnatish ancha qiyin va eng muhimi, bu tarozilarni hech qanday tarzda avtomatlashtirish mumkin emas.

Elektron avtomobil tarozilari

Ushbu uskunaning ishlash printsipti deformatsiyalar (siqilish) paytida qarshilikni o'zgartirishdan iborat. Tarozini natijalari imkon qadar aniq. Elektron avtomobil tarozilarini ishlatish mumkin bo'lgan harorat diapazoni juda katta farq qiladi (ba'zi ishlab chiqaruvchilar uchun -60 dan +60 gacha).

Butun dizayn mexanik tarozilarga qaraganda ancha ixchamroq. Va eng muhimi, ushbu uskuna yordamida siz tortish jarayonini avtomatlashtirishingiz mumkin. Elektron avtomobil tarozilari bir nechta tarmoqqa birlashtirib, kompyuterga ulanishi mumkin. Ushbu parametr yirik ishlab chiqarishda tortish mashinalarining buxgalteriya hisobini sezilarli darajada osonlashtiradi. Natijalarni masofadan turib ko'rish mumkin, dastur ma'lumotlarni qayta ishlashdan so'ng darhol barcha hisobotlarni yaratadi.

Xulosa

Yuk tarozilari turli sohalarda, jumladan, sanoat, qishloq xo'jaligi, savdo va qurilishda asosiy ro'l o'ynaydigan yuk og'irligini aniq hisobga olish va nazorat qilishning ajralmas vositasi hisoblanadi. Ular yuk xujayralari printsipti tufayli yuqori aniqlikdagi o'lchovlarni ta'minlovchi poydevor va poydevorsiz modellarni, shuningdek, elektron va mexanik tortish tizimlarini o'z ichiga olgan keng turdagi dizaynlarni taklif qiladi. Ushbu uskuna nafaqat me'yoriy talablarni qondirish va ishlab chiqarish jarayonlarini optimallashtirishga yordam beradi, balki tortish

jarayonini avtomatlashtiradi, bu esa uni yanada samaraliroq va kamroq mehnat talab qiladi.

Foydalanilgan adabiyotlar:

- 1.O‘zbekiston Respublikasi Vazirlar Mahkamasining 2020-yil maydagi “Transport vositalarining og‘irlik va hajm parametrlari ustidan nazoratni joriy etish chora-tadbirlari to‘g‘risida”gi 337-son qarori;
- 2.O‘zbekiston Respublikasi Prezidentining 2022-yil 12-iyuldagi “2022-2026-yillarda amalga oshirilishi rejalashtirilgan “Xavfsiz va ravon yo‘l” umummilliy dasturini tasdiqlash to‘g‘risida”gi PQ-316-son qarori.
- 3.O‘zbekiston Respublikasi Prezidentining 2022-yil 2-fevraldagi Toshkent shahri jamoat transporti tizimini yanada rivojlantirishga doir qo‘shimcha chora-tadbirlar to‘g‘risidagi PQ-111- sonli Farmoni.
- 4.<https://www.smartves.ru/press-center/tipy-avtovesov/>
- 5.<http://fvf-rbs.ru/articles/vgk.html>
- 6.<https://hook.report/2022/04/probki>

*Saparboeva D.S.
Fan va texnologiyalar universiteti
"Pedagogika" kafedra mudiri*

BO‘LAJAK BOSHLANG‘ICH TA‘LIM O‘QITUVCHILARNI TARBIYAVIY ISHLARGA TAYYORLASH KOMPETENSIYALARI

Annotatsiya. Ushbu maqolada bo‘lajak boshlang‘ich ta‘lim o‘qituvchilarini tarbiyaviy ishlarga tayyorlash, o‘quvchilar bilan ishlash mazmuni va ularning asosiy vazifalari va kompetensiyalari ilmiy pedagogik jihatdan asoslangan.

Kalit so‘zlar: Ta‘lim, tarbiya, jamiyat, mezon, strategiya, tafakkur, o‘qituvchi, o‘quvchi, qobiliyat, yoshlar, qadriyat, sog‘lom turmush tarzi, millat, kuch, imkoniyat, ijtimoiy faollik, mas‘uliyat, inson, qadr, jamoa, nufuz.

*Saparboeva D.S.
Head of the "Pedagogy" department
University of Science and Technology*

COMPETENCES FOR PREPARING FUTURE PRIMARY EDUCATION TEACHERS FOR EDUCATIONAL WORK

Annotation. In this article, the preparation of future primary education teachers for educational work, the content of working with students, and their main tasks and competencies are based on scientific pedagogy.

Key words: Education, upbringing, society, criterion, strategy, thinking, teacher, student, ability, youth, value, healthy lifestyle, nation, power, opportunity, social activity, responsibility, person, value, community, influence.

Bo‘lajak boshlang‘ich ta‘lim o‘qituvchisi intellektual jihatdan o‘quvchilarda aqliy qobiliyat, qiziquvchanlik, tasavvur, mustaqil bilim egallashga intilish, ijtimoiy jihatdan kirishimlilik, hazilni tushunish va o‘zi ham hazil qila olish, emotsional jihatdan vazminlik, ajablanish va hayratlanishga oid amaliy mashg‘ulotlar, axborot darslari, davra suhbatlari, individual suhbatlar, konsultatsiyalar, sog‘lom turmush tarzini, munozarali klublarni tashkil etish, innovatsiyalarni yaratish asosida individuallashgan, yangi bilimlarni egallash xususiyatlariga ega bo‘lishi lozim. Ushbu jarayonda ta‘lim sohasida yangi pedagogik texnologiyalar, innovatsiyalar, o‘qitishda yangi metodlar, yangi tashkiliy tuzilmalarni shakllantiradi va ularning birligini ta‘minlaydi. Bo‘lajak boshlang‘ich ta‘lim o‘qituvchilarini tarbiyaviy ishlarga tayyorlashda pedagogik muhitni yaratish, o‘quvchilarning bilimlarini rivojlantirish bo‘yicha tizimli ishlarni amalga oshirish, innovatsion faoliyatga tayyorlash mexanizmlarini optimallashtirish pedagogik imkoniyatlarini kengaytirish, pedagogik

innovatsiyalarni joriy etish va uning samaradorligini baholash asosida takomillashtirishga qaratilgan ilmiy izlanishlarni amalga oshirishda faol ishtirok etadi.

Ushbu jarayonda o'qituvchi sog'lom muhitni yarata olish, o'quvchilar bilan ijobiy muloqotni tashkil etish, turli salbiy psixologik ziddiyatlarni o'z vaqtida anglash va bartaraf etish, pedagogik jarayonlarni metodik jihatdan oqilona tashkil etish, tarbiyaviy faoliyat shakllarini to'g'ri belgilash, metod va vositalarni maqsadga muvofiq tanlay olish, tarbiya metodlarini, vositalarni muvaffaqiyatli qo'llash, axborot muhitida zarur, muhim, kerakli, foydali ma'lumotlarni izlash, yig'ish, qayta ishlash va ulardan maqsadli, o'rinli, samarali foydalanish, pedagogik faoliyatga nisbatan tanqidiy va ijodiy yondashish, o'zining ijodkorlik malakalariga egaligini namoyish eta olish, pedagogik jarayonini takomillashtirish, ta'lim sifatini yaxshilash, tarbiya jarayoninig samaradorligini oshirishga doir yangi g'oyalarni ilgari surish, ularni amaliyotga muvaffaqiyatli tatbiq etish, ta'lim jarayonining barcha ishtirokchilari, jumladan, o'quvchilarni tinglay bilish, ularga ijobiy ta'sir ko'rsata olish, izchil ravishda kasbiy o'sishga erishish, malaka darajasini oshirib borish, kasbiy faoliyatda o'z ichki imkoniyatini namoyon qilish, pedagogik texnologiyalarni o'zlashtirish, zamonaviy vosita, texnika va texnologiyalardan foydalana bilish, ta'lim-tarbiya ishlari bo'yicha tadbirlarni rejalashtirish, takomillashtirish bo'yicha takliflar kiritish, o'z ustida ishlash kasbiy mahoratini takomillashtirib borish, faoliyatga tanqidiy va ijodiy yondashish, ishchanlik qobiliyatini rivojlantirish, salbiy odatlarni bartaraf etish, o'z-o'zini namoyon etishi, ta'lim muhiti-tarbiya jarayonini tashkil etish va boshqarish, ta'lim mazmunini yangilash ishlarini o'rganishlari muhim hisoblanadi.

Bo'lajak boshlang'ich ta'lim o'qituvchilarini tarbiya jarayoniga tayyorlashda oila va mahalla hamkorligi kompetensiyasi asosida qiziqarli va doimo yangilanib turuvchi shakl, metod va vositalarini maqsad sari yo'naltirish, ular faoliyatini rejali tashkil etish hamda har tomonlama ta'sir etishda imkoniyat yaratib berish, shuningdek, davlat va nodavlat tashkilotlari bilan hamkorlikda amalga oshirish muhim ahamiyat kasb etadi. Ushbu jarayonda tarbiya izchillilik, uzviylik, ko'rgazmalilik, tadbirlarning yosh va psixologik xususiyatga mosligi, maqsadlarning mushtarakligi, o'z-o'ziga talabchanlik, shakl va metodlaridagi moslik tamoyillarga asoslangan xolda o'quvchilarni hayotga tayyorlash, sog'lom turmush tarzini namunali yo'lga qo'yish maqsadga muvofiq.

Bo'lajak boshlang'ich ta'lim o'qituvchilarini tarbiyaviy ishlarga tayyorlashda ularni o'quv faoliyatini sifatli amalga oshirishda iqtidorli yoshlarni aniqlash va ularni kasbga yo'naltirish tizimini takomillashtirish, ta'lim jarayonlarida inovatsion texnologiyalaridan foydalanishda pedagogik mahorat kompetensiyasi asosida o'quvchilarni kelgusi hayotini o'z qo'li bilan qura olishiga ishonirish, ezgu ishlarga rag'batlantirishi, eng muhimi ularni baxtli yashashga o'rgatishga doir ilg'or tajribalarni o'rganishi, hozirgi kunda dunyoda ruy berayotgan ijtimoiy-iqtisodiy o'zgarishlarni o'quvchilar ongi va qalbiga

yetkazishi muhim hisoblanadi. Ushbu jarayonda bo'lajak boshlang'ich ta'lim o'qituvchisining axborot texnologiyalaridan xabardor bo'lishi, o'quvchilarning qobiliyatlari va ehtiyojlariga muvofiq ravishda unumli foydalana olish, tarbiya mavzularini tanlash va o'zgartira olish, har bir tadbir uchun mas'uliyatni his qilish, muammoli vaziyatlar, vazifalarning murakkabligiga e'tibor qaratishda o'quvchilarning bilishiga oid qobiliyatini inobatga olish zarur. Chunki o'quvchilar dars jarayonida shunchaki ma'lumotni o'zlashtirmaydilar, balki yangi bilim olishga kirishadilar. Ushbu jarayonda o'qituvchi va o'quvchi munosabatlari, shaxsi maqsadga muvofiq shakllantirish uchun uyushtirilgan pedagogik jarayon uchun xizmat qiladigan zarur xulq-odoblarni yuzaga keladi. Ushbu jarayonda o'quvchilar hayotida tarbiyaviy ta'sirlar shaxsiy tajribalar va ehtiyojlar namoyon bo'ladi. O'quvchi faoliyatini tashkil etish, ichki kechinmalarini anglash, bahslashish, his qilish, aniq maqsad bilan ishlashda o'qituvchining samimiy munosabati ijobiy samara beradi.

Bo'lajak boshlang'ich ta'lim o'qituvchilarini tarbiyaviy ishlarga tayyorlashda millatlararo totuvlik kompetensiyasini amalga oshirish jarayonda millatlarning qadriyatlarini asrab-avaylash, turli millatlarning ajdodlari yaratgan milliy urf-odatlarini jamiyatda keng amalga oshirish, milliy ananalarni rivojlantirish asosida har bir o'quvchida insoniylik, millatparvarlik, mehnatsevarlik singari umuminsoniy madaniyatni shakllantiradi. Har bir millat vakillarining bir-birlarini hurmat qilishi, badiiy adabiyot va san'atga qiziqishlarini kuchaytirish ishlarini olib boradi. Yangi O'zbekistonda barcha millatlarning jipsiligini taminlash, moddiy va ma'naviy hayotlarini farovon qilish masalalariga oid tadbirlar o'tkazish, millat va elatlarning tarixini aks ettiruvchi san'at asarlari haqida o'quvchilarga ma'lumot berishga e'tibor qaratish, O'zbekistonda 130 dan ortiq millat va elatlarning bir oila sifatida totuv, inoq yashayotganligi haqida olib borilayotgan tadbirlar va ularga homiylik qiluvchi tashkilotlarning faoliyati haqidagi ishlar o'quvchilarning bilimlarini rivojlantirish va ma'naviy-axloqiy ta'sir etish, o'z-o'zini xis qilishida ijobiy samara beradi.

Bo'lajak boshlang'ich ta'lim o'qituvchilarini tarbiyaviy ishlarga tayyorlashda o'zbek xalqi hayotidan o'rin olgan va jamiyat tomonidan mustahkamlangan odob-axloq kompetensiyasiga amal qilish, jamiyat qonun-qoidalari axloqiy normalarini o'rganishda, tarbiyaviy ishlarni amaliyotga tatbiq etishda "Texnologiya", "Tarbiya" mashg'ulotlarida axloqiy muhit va tarbiyaviy ta'sir etish sinf jamoasida o'tadigan yig'ilishlar, tarbiyaviy soatlar, ma'ruzalar, suhbatlar kabilarda o'quvchilarning doimiy ishtirokini ta'minlash va ularning bilimlarini shakllantirishda individual xususiyatlarini to'liq va aniq hisobga olish, ularni tarbiyalashda mas'uliyatni yuqori darajada amalga oshirish, tarbiyaviy ishlarni tashkil etish, yig'ilish qarorlarini doimiy bajarish, jamoat ishlarida ishtirok etish va nazorat qilib borish kabi vazifalarni amalga oshiradi.

Bo'lajak boshlang'ich ta'lim o'qituvchilarini tarbiyaviy ishlarga tayyorlashda o'quvchilar jamoasini tashkil etish kompetensiyasini shakllantirish muhim hisoblanadi. Bunda bo'lajak boshlang'ich ta'lim o'qituvchisining

pedagogik-psixologik tayyorgarligining yuqori darajada bo'lishi bilan birga tarbiyaviy faoliyatni amalga oshirishda ijobiy natijani beradigan shakl va metodlarni tanlashi muhimdir. Bo'lajak boshlang'ich ta'lim o'qituvchisi o'quvchilar sinf jamoasining rivojlanishi va mustahkamlashda yordam berish, ularni bir-biriga yaqinlashtirish, do'stlikni mustahkamlash, psixologik va pedagogik savodxonligi bilan ajralib turadi. Shuning uchun bo'lajak boshlang'ich ta'lim o'qituvchisi tarbiya jarayonining optimal shart-sharoitlarini yaratish, o'quvchi maqsadini tushunish va uning mas'uliyatni yanada yuqori darajaga ko'tarishda ularda munosabat, tashabbuskorlik, tashkilotchilik xususiyatlariga ega bo'lishi muhim o'rin tutadi. Bunda ta'lim-tarbiya ishlarini amalga oshirishda jamoa a'zolarining ishtirok etishlari muhim hisoblanadi:

1. Buning uchun: jamoa hamkorligida tarbiyaviy ishlarni amalga oshirish rejasini tuzish.

2. O'quvchilarning yashash joylarida sport maydonchalari va komplekslari, klublar, axborot resurs markazlari, o'yin maydonchalari, yozgi teatrlar, texnik stansiyalari faoliyatini tashkil qilish.

3. O'quvchilarning qizikishlariga oid to'garaklar tashkil etish, ular bilan birgalikda ekskursiyalar, quvnoqlar va zukkolar kabi musobaqalar salomatlik, bilimlar kuni kabi bayram tadbirlarini o'tkazish asosida jamoani mustahkamlash.

4. Boshlang'ich ta'lim jarayonida jamoa faoliyatida turli tadbirlarni o'tkazish, ularni ijtimoiy aloqalarini kengaytirish va boyitish bilan birga ularda fuqarolik yetukligini shakllantirish.

5. Bo'lajak boshlang'ich ta'lim o'qituvchisi jamoa faoliyatida o'z ma'ruzalari bilan ilmiy-amaliy konferensiyalarda ishtirok etishi, o'z bilimlarini keng targ'ibot qilishi, ustoz-shogirdlar davrasida pedagogika asoslarini o'rganishi muhim hisoblanadi. Bo'lajak boshlang'ich ta'lim o'qituvchisining jamoa muammolarini chuqur tushunishlari ta'lim samaradorligini oshirishni ta'minlaydi. Ushbu kompetensiyalarni amalga oshirishda o'qituvchining fikrlash doirasi, ekstremal holatlarda ishlay olish layoqati, nohush holatlarga qarshi tura olish, aloqa, hamkorlik, ixtiloflarga bardoshlilik, mehnatdan qoniqish, o'z-o'zini rivojlantirish, faoliyatini loyihalashtirish, o'zini o'zgartira olish kabi kompetentlarga ega bo'lishi maqsadga muvofiqdir. Chunki ushbu jarayonlarda o'qituvchining kasbiy va psixologik sifatlarga ega bo'lishi tarbiya ishlarini tashkiliy, ijtimoiy- siyosiy, ma'naviy axloqiy, iqtisodiy jihatdan tahlil etish, nazorat qilish va muayyan mazmundagi xulosalarni tayyorlash kabilar mas'uliyatli bo'lishni talab etadi. Ushbu jarayonda bo'lajak boshlang'ich ta'lim o'qituvchisi:

-mamlakatimiz va xorijiy davlatlar tajribalari asosida ularning o'sishi va ishchanlik malakasini yuksalishini nazorat kilish sifatlarini ifoda etuvchi model va uning me'yorlari, kategoriyalarini o'rganish;

-tarbiyaviy ishlarni amalga oshirishda milliy urf-odat va udumlaridan samarali foydalanish va ularga nisbatan o'z munosabatini bildirish;

-tarbiya ishlarining asoschisi sifatida o'zining individual xususiyatlarini ya'ni kasbiy bilim, malaka, ko'nikma va qobiliyati, xulq-atvor madaniyati, nutqi, muomalasi, kiyinishi, ma'naviy axloqiy sifatleri bilan na'muna bo'lishi, uning o'ta nozik, noyob xususiyat va alomatlar, insoniy fazilatlarga, yangi fikrlarga ega bo'lishi, ta'sirchanligi, qat'iyat va irodasi bilan o'quvchilarni boshqarishi, uni turli qaltis qadamlardan asrab, to'g'ri yo'lga boshlashga har qanday sharoitda ham ularning ruhini ko'tarish, lo'nda qilib aytganda, har qaysi ta'lim oluvchining yuragiga yetib borishga, uning kuchiga kuch, ishonchiga ishonch, g'ayratiga g'ayrat qo'shishga qodir bo'lishi shart.

Boshlang'ich ta'lim jarayonida o'quvchilarni ezgu niyatlar bilan o'ziga ergashtira olgan o'qituvchi hamisha ularning hurmat e'tiborida bo'ladi. O'quvchilarni bir-birlariga suyanib, tayanib, bir-birlarini tushunib, muammolarini birgalashib bartaraf etishga da'vat qilish o'qituvchining noyob fazilati hisoblanadi. O'qituvchining katta dushmani- kibru havo, o'ziga bino qo'yish, o'ziga ortiqcha baho berishdir. Bunday o'qituvchi uzoqqa borolmaydi. O'qituvchi o'quvchilar o'rtasida ma'naviy ruhiy, siësiy-axloqiy muhitni yaratadi. Demak, tarbiyaviy ishlar jarayonida o'qituvchining kayfiyati o'quvchilarga bo'lgan munosabati muhim o'rin tutadi. Albatta, o'quvchilar har xil. Ularning orasida gap uqmaydigan, ba'zan esa ro'y rost e'tiroz bildiradiganlari ham bo'ladi. O'qituvchi degani barcha fazilatlari bilan bir qatorda nuqsonlari bilan ham yaxlitligicha ustozdir. Haqiqiy o'qituvchi ana shu yaxlitlikni anglab, aql bilan his etib, o'quvchilarning boshini qovushtirib, o'ziga ergashtira olishi bilan ular oldida munosib hurmat va izzat qozonadi. Tarbiyaviy ishlarni amalga oshirishda o'qituvchining ma'naviy ahamiyatga ega bo'lgan holatlari, uning mas'uliyati, axloqiy tamoyil va qoidalariga ongli ravishda rioya etish irodasi o'quvchi hayotini butunlay o'zgartirish, tahlil etish, anglab yetish va himoya qilish, nafaqat o'z xatti-harakatlari, ishlari va uning natijasi uchungina emas, balki o'z qobiliyatini ro'yobga chiqarish samaradorligini oshiradi.

Bugungi kunda bo'lajak boshlang'ich ta'lim o'qituvchilarini tarbiyaviy ishlarga tayyorlashda ularni mamlakat ijtimoiy- siyosiy hayotining barqarorligini ta'minlash, ma'naviy-axloqiy xususiyatlarining ustuvorligini takomillashtirish, o'qituvchining tafakkurida mafkuraviy immunitetni kuchaytirish, sinf jamoasini jipsligi, jismoniy sog'lomligi, demokratik hamda umummilliy taraqqiyoti tahdidlariga qarshi tura olish kabilarni amalga oshirish muhim o'rin tutadi.

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Sattorov T.T.
assistant
“Accounting” department
Samarkand Institute of Economics and Service

THEORETICAL BASIS OF DRUG USE IN THE PHARMACEUTICAL INDUSTRY: INTERNATIONAL AND NATIONAL ASPECTS

Abstract. The article's recipes contain basic theoretical and theoretical tools aimed at minimizing and eliminating minor problems faced by Turkmens.

Key words: Dosage forms, medicines, medicinal products, production, technology, supply, storage, transportation and sales.

Presidency of the Republic of Uzbekistan “Republic of Uzbekistan “2022 to establish the state budget of the Republic of Uzbekistan” and the Law of the Republic of Uzbekistan on measures to ensure the security of the Republic of Uzbekistan” and resolutions of the “2022-2024 to establish funds in the budget budget for distribution and development instructions the purpose of the indicator” yes “ agricultural reform, especially the state sector in the process of improvement, the market of municipalities, the food sector of the participating countries, food and services, development subjects of municipalities have strengthened their fundamental rights, the investment sphere of the company “strategic goals belgilab berylgan” is one of the largest producers of agricultural products in world strategic goal of the SBU food and agricultural industry forecast of agricultural exports for 2022, 2023 and 2024

Solving such pressing problems and tasks at the country's enterprises today requires improving not only practical, but also theoretical issues of accounting for finished products. During the study, one can see that when studying regulations, international and national standards, as well as foreign and domestic literature, the given various definitions and definitions of finished product terms, including medicines.

The Law of the Republic of Uzbekistan “On the quality and safety of medicines” contains the following definitions on medicines:

Food products - products made from medicines and sold in natural or processed form;

Medicine - a medicinal substance (including ethyl alcohol), food products and their components, medicinal substances and substances related to food substances, materials, auxiliary and packaging materials and products made from them:

Children's medicines are special medicines that meet the physiological characteristics of the child's body (up to three years);

Circulation of medicines - activities related to the production, manufacture, purchase, processing, supply, storage, transportation and sale of medicines;

The quality of medicinal products is a set of criteria that determine the consumer properties of medicinal products and ensure their safety for human life and health;

Medicinal substance - plant, animal, microbiological, as well as mineral objects used for food production.

International Accounting Standard No. 2 (IAS) Inventories defines the term “inventories” as follows:

“Inventories are assets held for sale in the ordinary course of business, in the process of production for such sale, or in the form of raw materials and supplies intended for use in the process of production or provision of services. The research required the views and comments of a number of foreign scientists.

As Russian scientist S.N. Polenova noted, “finished products are a fully completed production process at an enterprise that meets standard requirements and technical specifications, products accepted by the service, issued with acceptance documents and delivered to the finished products warehouse.

The National Accounting Standard No. 4 of the Republic of Uzbekistan provides the following definitions:

Inventories are material assets stored in the process of activity for the purpose of subsequent sale and located in the production process, as well as used in the process of producing products, performing work or providing services, or for carrying out administrative and socio-cultural tasks. Finished products manufactured in the organization (assets intended for sale and undergone processing (assembly), corresponding to the technical and quality characteristics stipulated by the contract or the requirements of other documents in cases established by law).

When conducting research on products, including finished products, it is necessary to take into account the scientific research of domestic scientists.

According to the economists of our country K.S. Ismailov and A.B. Utemuratov, “Finished products are the result of the production process. At manufacturing enterprises, labor products include all finished products produced.”

Online sources in dictionaries related to the field provide the following definition of these categories:

Product is the result of economic activity, embodied in things and services. Its material-material form has the appearance of a material product.

Finished Goods - goods that have undergone the production process or purchased for resale and are owned by the company, but have not yet been sold.

Finished Goods is a category of inventory typical for manufacturing enterprises. These are products that have completed the production process, but have not yet been sold or distributed to sellers. Finished products are products that have gone through all stages of technological processes and meet established requirements (customer, state standards, technical specifications). It is taken into

account by type, grade and storage location according to real and cost indicators. Depending on the adopted accounting policy, ready

Products can be accounted for at actual production costs or at estimated prices.

Finished products are the final product of the process of its production at enterprises. Finished products are considered products that have passed all stages of technological processing, comply with approved standards and technical specifications (provided with a certificate or other document confirming their quality), received and delivered to the warehouse or shipped to the buyer.

Finished goods are products or goods produced during the full production cycle or purchased in finished form, but not yet sold to customers

Finished products - products and semi-finished products, fully prepared by processing, complying with current standards and technical specifications accepted at the warehouse of the organization and the customer (buyer)

Finished products (TM) are goods produced by a company for the purpose of further sale

Thus, as a result of the research carried out, based on the descriptions and descriptions given in the literature, we can conclude that the finished product is a product independently produced and completed by the enterprise, which must fully meet the requirements established by the state and be ready in the warehouse for sale to customers. This asset, which is a finished product for the manufacturing enterprise, is intended for the processing process and is an acquired inventory

The above international and national standards, as well as those set out in information sources, have important scientific and practical significance and reveal important aspects of the finished product. However, from these descriptions it is clear that there is no single description of products, including ready-made ones, which contain all their properties. They cannot be said to cover every aspect of the product and finished product. What is the current task of accounting for finished products? What does our national asset standard cover for this business and what issues exist? What approaches exist in international financial reporting standards and what are the needs for improving our national standard? What should you pay attention to in terms of improving the theoretical foundations of accounting for finished products?

One of the important tasks facing international and national accounting is the search for answers to the listed and other pressing questions relating to the accounting of finished products.

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Shirinov U.A.
dotsent
SamISI
Mamasharifov P.
magistr
SamISI

SUG'URTA ZAXIRALARI AUDITINING METODOLOGIK MASALALARI

Annotatsiya. Maqolada sug'urta tashkilotlarida rezervlar tasnifi va tavsifi hamda ularni auditorlik tekshiruvdan o'tkazishning maqsad va vazifalari bayon qilingan.

Kalit so'zlar: sug'urta, sug'urta zaxiralari, rezev kapitali, audit, auditorlik tekshiruvlari.

Shirinov U.A.
associate professor
SamIES
Mamasharifov P.
master
SamIES

METHODOLOGICAL ISSUES OF THE AUDIT OF INSURANCE RESERVES

Abstract. The article describes the classification and description of reserves in insurance organizations, as well as the goals and objectives of their audit.

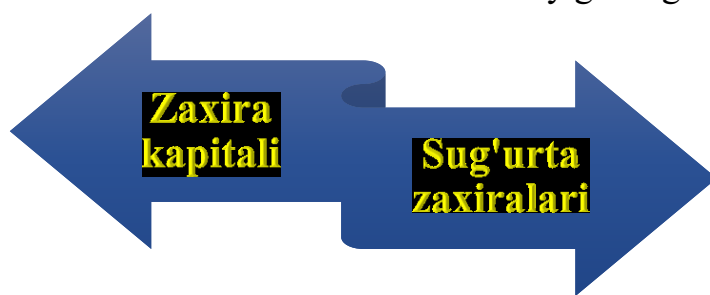
Key words: insurance, insurance reserves, reserve capital, audit, audit inspections.

Jahon iqtisodiyoti va global moliya tizimining uzluksiz rivojlanishi sharoitida sug'urta tizimi va uning asosiy komponenti, sug'urta bozorining ahamiyati ortib bormoqda. Birinchidan, jahon amaliyotida sug'urta tizimi ma'lum bir fondlarni shakllantirish va xo'jalik yurituvchi sub'ektlarning mablag'larini qayta taqsimlash munosabatlari orqali iqtisodiyotda investitsiyalarning eng katta manbalaridan biri hisoblanadi. Ikkinchidan, sug'urta zamonaviy iqtisodiyotda murakkab va o'sish tendensiyasiga ega bo'lgan risklarni boshqarishning asosiy shakllaridan biridir. Bundan tashqari, sug'urtalangan shaxsning mulkiy manfaatlarini himoya qilishni ta'minlash doimiy ravishda takror ishlab chiqarish jarayonini yuzaga keltiradi, bu esa iqtisodiy va moliyaviy barqarorlikni ta'minlashga yordam beradi. Shuni ta'kidlab o'tish joizki, zamonaviy global

sug'urta bozorining umumiy aylanmasi 2,4 trln. AQSh dollarini tashkil etadi. Rivojlangan davlatlar tajribasi ijtimoiy-iqtisodiy muammolarni samarali hal etishda sug'urtaning rolini ortib borayotganligidan dalolat beradi.

Sug'urta tizimi va uni amalga oshirish mexanizmini takomillashtirish bo'yicha xalqaro amaliyotda keng qamrovli tadqiqotlar amalga oshirib kelinmoqda. Ushbu tadqiqotlar sug'urta tizimini tadbirkorlik sub'ektlarining mulkiy manfaatlarini himoya qilishning samarali shakli sifatida, shuningdek, sug'urta kompaniyalari tomonidan milliy iqtisodiyotga investitsiya kiritish uchun mablag'larni jalb qilish usuli sifatida ko'rib chiqadi. Lekin bugungi kunda sug'urta tizimining iqtisodiy mohiyati va faoliyat mexanizmini tahlil qilish, mamlakatda sug'urta tizimining institutsional muhitini shakllantirishning o'ziga xos xususiyatlari va sug'urta tizimini amalga oshirish mexanizmini takomillashtirishga qaratilgan tadqiqotlarni olib borish asosiy masalalardan biri bo'lib qolmoqda.

Sug'urta korxonalarida zaxiralarni ikki asosiy guruhga ajratish mumkin:



1-rasm. Sug'urta korxonalarida zaxira turlari.

Rezerv kapitali – bu korxonaning turli maqsadlarlarda va turli manbalar evaziga shakllantirilgan xususiy kapitalning bir turi. Ushbu kapital asosan quyidagi manbalar hisobidan vujudga keladi:⁸⁴

- mavjud mulkni qayta baholash natijasida paydo bo'ladigan yangi qiymat evaziga;

- korxonaning sof foydasi hisobidan;
- qaytarib bermaslik sharti bilan kelib tushgan mulk evaziga.

O'zbekiston Respublikasi Moliya vazirligi tomonidan tasdiqlangan «1 yanvar holati bo'yicha asosiy fondlarni har yili qayta baholashni o'tkazish tartibi to'g'risida NIZOM»ga⁸⁵ va unga kiritilgan o'zgartirishlarga muvofiq korxonalar har yilning 1 yanvar holatiga o'zlarining asosiy vositalarini, tugallanmagan qurilish obyektlarini bozor baholaridan kelib chiqib yoki Iqtisodiyot vazirligi belgilagan koeffitsiyentlar asosida qayta baholaydilar⁸⁶. Qayta baholashda asosiy vositalarning oldingi boshlang'ich qiymati va jamlangan eskirishi real bozor baholaridan kelib chiqqan holda, ko'payish yoki kamayish tomonlariga

⁸⁴Уразов К.Б. Молиявий ҳисоб ва ҳисобот. Замонавий педагогик технологияларга асосланган кўргазмали маърузалар курси. 2-қисм. - СамИСИ, 2019. - 155 бет.

⁸⁵Ўз.АВ томонидан 2002 йил 4 декабрда рўйхатга олинган, № 1192

⁸⁶Микрофирмалар ва кичик корхоналар ҳар 3 йилда бир марта қайта баҳолайдилар

o'zgartirilishi mumkin. Agar o'zgartirishlar o'sish tomonga yuz bergan bo'lsa, o'rtadagi ijobiy farq rezerv kapitalini vujudga kelishiga sabab bo'ladi.

O'zbekiston Respublikasi qonunlari va ta'sis hujjatlariga muvofiq korxonalar o'zlarining sof foydasi evaziga rezerv kapitalini shakllantirishlari mumkin. Chunonchi aksiyadorlik jamiyatlari va aksiyadorlar huquqini himoya qilish to'g'risida qonunga muvofiq ular o'zlarining ustav kapitali miqdorining 15 %gacha bo'lgan miqdorida sof foyda evaziga rezerv kapitalini shakllantirishlari shart. Boshqa turdagi korxonalar (MChJ, xususiy korxonalar, xorijiy investisiyalar ishtirokidagi korxonalar) ham o'zlarining sof foydasidan ta'sischilar yig'ilishi qaroriga asosan ma'lum foizda rezerv kapitaliga ajratma qilishlari mumkin.

Qaytarib bermaslik sharti bilan kelib tushgan mulk evaziga vujudga keladigan rezerv kapitali. Ushbu kapital har qanday korxonada mol-mulkni beg'araz olish natijasida vujudga keladi. Respublikamizning Soliq kodeksiga muvofiq bepul kelib tushgan mulklar bitta tizim korxonalarida yuqori tashkilotning qarori bilan balansdan balansa o'tkazish tarzida amalga oshirilgan bo'lsa, daromad solig'iga tortilmaydi. Boshqa xo'jalik yurituvchi subyektlarda bepul kelib tushgan mulk ularning yalpi daromadiga kiradi va soliqqa tortiladi.

Yuqorida zikr etilgan manbalar evaziga shakllanadigan rezerv kapitali korxonalarda turli maqsadlarda, masalan ishlab chiqarishni rivojlantirish, xodimlarni rag'batlantirish, imtiyozli aksiyalar egalariga dividend hisoblash, korxonalar likvidasiyasi chog'ida vujudga kelgan o'tgan yillar zararlarini qoplash qoplash va boshg'a maqsadlarda ishlatiladi.

Rezerv kapitalining jamlangan summasi korxonalar tugatilishida taqsimlanmagan foydaga qo'shiladi va ta'sischilar o'rtasida taqsimlanadi.

Rezerv kapitali bo'yicha buxgalteriya hisobining asosiy vazifalari bo'lib quyidagilar hisoblanadi:

*rezerv kapitalini vujudga kelishini to'g'ri va o'z vaqtida hisob va hisobotda aks ettirish;

*rezerv kapitalining tegishli maqsadlarda ishlatilishini ta'minlash, nazorat qilish hamda to'g'ri va o'z vaqtida hisob va hisobotda aks ettirish.

Sug'urta korxonalarida sug'urta zaxiralari quyidagilardan iborat:

- Ishlab topilmagan mukofotlar zaxirasi
- Sodir bo'lgan lekin xabar qilinmagan zararlar zaxirasi
- Xabar qilingan lekin bartaraf etilmagan zararlar
- Ogoxlantirish chora-tadbirlari zaxirasi
- Aktivlarning nomuvofiqligi zaxirasi
- Falokatlar zaxirasi
- Hayot sug'urtasi bo'yicha zaxiralar
- Ishlab topilmagan mukofotlar zaxirasidagi qayta sug'urtalovchilarning

ulushi

➤ Xabar qilingan lekin bartaraf etilmagan zararlar zaxirasidagi qayta sug'urtalovchilarning ulushi

➤ Sodir bo'lgan lekin xabar qilinmagan zararlar zaxirasidagi qayta sug'urtalovchilarning ulushi

➤ Hayot sug'urtasi bo'yicha zaxiralardagi qayta sug'urtalovchilarning ulushi

M.Abduraimova esa o'zining qarashlarida, sug'urta tashkilotlarining moliyaviy hisobotini tekshirish makroiqtisodiy darajada ahamiyatli bo'lib, auditorlik tekshiruvining faoliyat yuritishi quyidagilar bilan belgilanadi: ⁸⁷

1.Sug'urta tashkilotining moliyaviy hisobotini tekshirish va natijalardan manfaatdor foydalanuvchilar qarorlari uchun, sug'urta tashkilotiga qiziqish bildirgan shaxslar, davlat organlari va jamoatchilik uchun qo'llaniladi.

2.Sug'urta tashkilotining moliyaviy hisobotini audit o'tkazish jarayoni bir qancha sabablar oqibatida buzilishi yoki bo'lmasa, ma'lumotlarning yetarli bo'lmasligi natijasida auditor o'zi kutgan maqsadga erisholmasligi mumkin. Masalan, sug'urta tashkilotida zaxiralar shakllantirishda me'yoriy talabga rioya qilinmagan, moliyaviy hisobotlarida sodir bo'lgan operatsiyalar noaniqlikka ega, bu esa har jihatdan subyektga borib taqalishi va shunga o'xshash bir qancha jarayonlarni sanab o'tgan.

U.A. Shirinov "Sug'urta sohasidagi auditorlik faoliyatini o'ziga xosligi, avvalo, bu borada maxsus sug'urta qonunchiligi mavjudligi, mazkur sohada buxgalteriya hisobini yuritishni.... tubdan farq qilishi bilan tavsiflanadi."⁸⁸

M.Abduraimova sug'urta tashkilotlarida auditorlik tekshiruvining natijalarini rasmiylashtirish auditor professionallik asosida auditorlik tekshiruvlarini tashkil qilish va moliyaviy hisobot ishonchligini xolis va halol tekshirish natijalari yuzasidan xulosa yoki fikri bilan aks ettirish jarayoni hisoblanadi.⁸⁹

1.Auditor tomonidan sug'urta tashkilotlarini tekshirishda, avvalo, auditor audit strategiyasini tuzishda sug'urtaning xususiyatidan kelib chiqib yondashuvni tanlashi kerak.

2. Auditor tekshiruvni boshlashdan oldin, albatta, sug'urta tashkilotining ichki nazorat tizimi bilan yaqindan tanishib, yetarlicha ma'lumotga ega bo'lishi kerak.

3. Auditor tekshiruv jarayonlarini optimallashtirish uchun, albatta, tarmoqning risk hududini tanlab, tekshiruvning ko'p qismini o'sha hududga targ'ib qilishi kerak.

Xulosa qilib aytadigan bo'lsak sug'urta korxonalarida auditorlik tekshiruvlarini to'g'ri tashkil etish, ularda sug'urta rezervlari xarakatini to'g'ri tashkillashtirilganini o'rganish korxonalar iqtisodiy ko'rsatkichlariga ham bevosita ta'sirini o'tkazadi.

⁸⁷Абдураимова М. "Суғурта ташкilotларида молиявий ҳисоботини тузиш ва аудиторлик текширувидан ўтказиш тартибини такомиллаштириш" мавзусидаги докторлик диссертацияси. 2020 йил.

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⁸⁹Абдураимова, Мафтунахон. "Суғурта ташкilotларини аудиторлик текширувидан ўтказиш методологияси." *Iqtisodiyot va ta'lim* 24.1 (2023): 238-244.

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Shirinov U.A.
dosent
SamISI
Nasriddinov B.K.
magistr
SamISI

QURILISH KORXONALARIDA DAROMADLAR AUDITINI TAKOMILLASHTIRISHNING MUAMMOLARI

Annotasiya. Maqolada qurilish korxonalarida daromadlar auditini tashkil etish dastaklari, daromadlar auditini tashkil etish masalalari, daromadlar auditini o'tkazish ketma-ketliklari bayon qilingan.

Kalit so'zlar: qurilish korxonalari, daromadlar auditi, audit ketma-ketligi, audit o'tkazish tartibi.

Shirinov U.A.
associate professor
SamIES
Nasriddinov B.K.
master
SamIES

PROBLEMS OF IMPROVING REVENUE AUDIT IN CONSTRUCTION ENTERPRISES

Abstract. The article discusses the levers of organizing income audits at construction enterprises, issues of organizing income audits, and the sequence of income audits.

Key words: construction enterprises, income audit, sequence of inspections, procedure for conducting inspections.

Mamlakatni modernizasiya qilish, raqamli iqtisodiyotni rivojlantirish, innovasion jarayonlarini jadallashtirish hamda milliy iqtisodiyotni tubdan yaxshilash sharoitida qurilish tashkilotlari faoliyati samaradorligini oshirish muhim ahamiyatga ega.

O'zbekiston Respublikasi Prezidenti Shavkat Mirziyoyevning Oliy Majlis va O'zbekiston xalqiga Murojaatnomasida "Iqtisodiyotimizda kundun-kunga yangi-yangi yo'nalish va sohalar yaratilmoqda. Bu borada xususiy tashabbuslarni yanada kengaytirish, ularga yangi istiqbollarni ochish maqsadida endi "qo'l boshqaruvi"dan – aniq natijaga ishlaydigan tizimli boshqaruvga o'tish vaqti keldi" deb ta'kidlagani bejiz emasdir. Keng ko'lamli va samarali islohotlarimiz natijasida yalpi ichki mahsulot hajmi ilk bor 80 milliard dollardan oshdi.

Iqtisodiyotimizga shu yilning o'zida 8 milliard dollar to'g'ridan-to'g'ri xorijiy investisiyalar kirib keldi, eksportimiz esa, 19 milliard dollarga yetdi⁹⁰. Davlat statistika qo'mitasi ma'lumotlariga ko'ra, 2022-yilning yanvar-noyabr oylarida O'zbekistonda 115,1 trln. so'mlik qurilish ishlari bajarilgan. Bajarilgan qurilish ishlari hajmi o'tgan yilning mos davriga nisbatan 5,7 % ga oshgan (1-rasm).

2022 yilda O'zbekistonda yalpi ichki mahsulotni iqtisodiy o'sish sur'ati 5,9 foizni tashkil etib, 2023 yilda 6,2 foiz, 2024 yilda 6,6 foiz o'sishga erishish rejalashtirilgan. YaIM hajmi qariyb 840 trln so'mga yetishi ko'zda tutilgan edi. Ma'lum qilinishicha, 2022 yilda asosiy **tarmoqlar kesimida yalpi ichki mahsulot tarkibi** quyidagicha shakllanadi: sanoat - 217,7 trln so'm, qishloq xo'jaligi - 207,6 trln so'm, **qurilish - 52,5 trln so'm**, xizmatlar sohasi - 300,3 trln so'm⁹¹.



1-rasm. O'zbekistonda bajarilgan qurilish ishlari hajmi⁹².

Mamlakatimizda 2022 yilning yakuni bo'yicha asosiy tarmoqlarda kutilgan real o'sish miqdori: qurilish - 8,1 %, sanoat - 7 %, xizmatlar sohasi - 6,5 %, qishloq xo'jaligi - 3,1 % ko'zda tutilgan edi. Yuqoridagi statistik ma'lumotlardan ko'rinib turibdiki, qurilish industriyasini rivojlantirishda qurilish mashina-mexanizmlarni ish faoliyatiga ham alohida urg'u berib o'tsak maqsadga muvofiqdir. Har qanday rivojlangan davlatlarda bevosita qurilish tashkilotlari faoliyatini asosiy ko'rsatkichlarini qurilish mashina-mexanizmlar tomonidan bajarilgan ishlar hajmi hisoblanadi. Shuni ta'kidlash joizki, respublikamizda, qurilish ishlarini bajarilish hajmi yillar davomida keskin o'sib bormoqda (1-jadval).

⁹⁰ Ўзбекистон Республикаси Президенти Шавкат Мирзиёевнинг Олий Мажлис ва Ўзбекистон халқига Мурожаатномаси.20.12.2022 йил.

⁹¹ <https://www.gazeta.uz/uz/2021/11/11/gdp-2022/>

⁹² <https://www.gazeta.uz> - «Газета.уз» интернет-нашри. © 2008-2023.

Jadval ma'lumotlaridan ko'rinib turibdiki, mamlakatimizda qurilish ishlarini bajarilish ko'rsatkichi 2022 yilda 2018 yilga nisbatan, 125,1 foizga keskin ravishda o'sgan bo'lib, bajarilgan qurilish ishlari hajmi bevosita eng katta ko'rsatkichi, ya'ni 246,9 foizi Toshkent viloyatiga to'g'ri keladi. Bundan ko'rinib turibdiki, mamlakatimizda oxirgi to'rt yil mobaynida qurilish ishlari keskin ravishda o'sganligi milliy iqtisodiyotimizda va aholi turmush darajasini yanada yaxshilanishidagi hamda qurilish industriyasini rivojlanishidagi o'rni alohida ahamiyat kasb etilgan. Qurilish tarmog'i iqtisodiyotning barcha sohalari moddiy-texnik bazasini yaratishda hamda aholining shinam uy, ijtimoiy va muhandislik infratuzilmasi xizmatlari, shuningdek, madaniy xordiqqa bo'lgan ehtiyojlarini qondirishda muhim rol o'ynaydi.

Daromadlar hisobi va auditi bo'yicha bir qancha olimlar va tadqiqotchilar izlanish olib borishgan, jumladan, K.B.Urazov, U.A.Shirinov, T.Yaxyoyev va boshqalar.

Qurilish tashkilotlarida audit tekshiruvini o'tkazish va uni tashkil etishning bir qancha xususiyatlari mavjud. Jumladan, qurilish ishlarini auditdan o'tlazish bir muncha qurilish sohasiga oid bilimlarni ham talab qiladi.

1-jadval

O'zbekiston Respublikasida qurilish ishlarining bajarilish ko'rsatkichlari⁹³ (mlrd.so'm)

Xududlar	2018	2019	2020	2021	2022
O'zbekiston Respublikasi	51129,3	71156,5	88130,3	107492,7	115 110,4
Qoraqalpog'iston Respublikasi	2182,7	3315,4	3992,5	4480,6	4 675,6
Andijon	2819,5	3539,1	4673,0	5657,8	6 025,3
Buxoro	3581,2	4368,1	5659,8	7401,1	7 287,8
Jizzax	1564,3	2510,6	2715,0	3085,4	3 090,3
Qashqadaryo	3701,1	4365,3	4832,6	6336,6	6 782,3
Navoiy	2280,8	3464,0	3944,7	5155,5	5 526,2
Namangan	2257,6	3471,0	4678,2	5556,7	5 998,1
Samarqand	3299,0	4527,2	5755,3	7385,7	7 746,7
Surxondaryo	2879,7	3979,7	4774,7	5868,4	5 816,1
Sirdaryo	1001,1	1926,2	2407,6	2708,8	2 569,7
Toshkent	3006,7	5594,1	7102,6	9401,2	10 429,7
Farg'ona	2942,7	4162,8	5473,9	6993,7	7 395,6
Xorazm	1878,3	2496,8	2856,8	4228,5	4 220,5
Toshkent.sh	10870,7	16256,9	19215,4	26535,3	28 236,2

Qurilish ishlarini audit qilishda quyidagi xolatlariga jiddiy ahamiyat berish lozim:

- ❖ qurilish ishlari smetalari to'g'ri qilibgani;
- ❖ qurilishga oid daromadlarni to'g'ri tan olinayotganligi;

⁹³ <https://stat.uz/uz/rasmiy-statistika/construction-2>

❖ qurilish ishlarida ishlayotgan xodimlarga to'g'ri ish haqlari hisoblanayotganligi;

❖ qurilish inventarlarini to'g'ri hisobdan chiqarilayotgani;

❖ qurilishdagi mashina va uskunalarga to'g'ri eskirish hisoblayitganligi va boshqalar.

Qurilish tashkilotlarida daromadlar auditi ma'lum xususiyatlarga ega bo'lib, ularni quyidagicha ifodalash mumkin:

✓ Daromadlarni shakllanishi bir qancha ko'rsatkichlarga bog'liq;

✓ Daromadlar hisobot davridagi korxonada faoliyatining yakuni hisoblanadi;

✓ Korxonaning foyda bilan ishlashi yoki hisobot davrini zarar bilan yakunlanishi moliyaviy natijalarni shakllantiruvchi ko'rsatkichlarga bevosita bog'liq bo'ladi;

✓ Daromadlar oldindan aniq bo'lmagan xavf-xatarlar, tasodifiy hodisalar o'z ta'sirini ko'rsatadi.

Qurilish tashkilotlarida daromadlar auditining maqsadi buxgalteriya hisobida va hisobotida korxonada daromadlarini ishonchli aks etganligi, daromadlarni qonuniy taqsimlanganligi va barcha hisob kitoblar O'zbekiston Respublikasi me'yoriy hujjatlariga, MHXS va BHMSga mosligini aniqlashdan iboratdir.

Qurilish tashkilotlarida daromadlar auditini tekshirish uchun ma'lumot manbalari bo'lib quyidagilar hisoblanadi:

1. Ta'sis hujjatlari, ta'sischilar majlisi bayonnomalari, buyruqlar, farmoyishlar.

2. Dastlabki hujjatlar (kirim va chikim kassa orderlari, to'lov qaydnomalari, chiptalar, schetlar, to'lov topshiriqnomalari, ilova kilingan so'mdagi va valyutadagi schetlari bo'yicha bank ko'chirmalari, sotish, foyda va zararlar, soliqlar va yig'imlarni to'lash uchun foydadan foydalanish schetlari bo'yicha hisob registrlari (qaydnomalar, jurnal- orderlar, mashinogrammalar).

3. Bosh kitob, moliyaviy natijalar to'g'risida hisobot, alohida soliqlar bo'yicha hisob- kitoblar va boshqalar hisoblanadi.

4. 9000-«Asosiy faoliyatdan olingan daromadlar hisobi schyotlari» ma'lumotlari.

5. 9300 -" Asosiy faoliyatning boshqa daromadlarini hisobi schyotlari " ma'lumotlari.

6. 9500 «Moliyaviy faoliyat daromadlarini hisobga oluvchi schotlar» ma'lumotlari.

Xulosa qilib aytganda qurilish tashkilotlarida daromadlar hisobini to'g'ri tashkil etilishi korxonada iqtisodiy faoliyatini yaxshilashiga sabab bo'ladi. Bu esa o'znavbatida daromadlar auditini ham to'g'ri o'tkazilishi ham axborot foydalanuvchilarni qaror qabul qilishiga sabab bo'ladi.

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Shodmonova Z.U.
assistant
"Economic theory" department
Samarkand institute of economics and service
Berdikulova M.Z.
student
Samarkand institute of economics and service

CAUSES OF INCOME INEQUALITY IN A MARKET ECONOMY

Abstract. In this article, the factors driving the origin of income inequality in the conditions of the market economy, their causes and the research carried out for the purpose of prevention and its results are highlighted. Also, as a clear example of this problem, income inequality in certain sectors in the Republic of Uzbekistan is presented with statistical data.

Key words: income inequality, market forces, social development, government policy, Lorenz curve, Gini coefficient, financial sector.

As we all know, the problem of wealth and poverty has always worried people. The reason is that as a result of regulating social progress and equality in any country, the maximum level of economic progress and development can be achieved in the country. But at present, even in developed, that is, from the point of view of development, there is a problem of income inequality even in the TOP-10 countries in the world. Scientists and researchers have been researching and explaining their concepts for many years. However, a clear solution has not yet been found, although the results of this research are widely used to prevent the mentioned economic problem.

The growth of NSE is the outcome of multiple forces. It reflects changes in the world of work brought about by globalization and social change – such as the increased role of women in the world's labour force – but also regulatory changes. At times, laws have encouraged the use of NSE – either purposefully or unwittingly – by creating incentives for its use by enterprises. In other cases, there are gaps or grey areas in the law that have provided fertile ground for the development of non-standard work arrangements. Some of these gaps have resulted from the decline of collective bargaining in countries where collective agreements had previously been the dominant form of regulation.

Differences in the slopes of tenure profiles have important implications both for measurement and for understanding job turnover. Since potential earnings and investment in human capital are not directly observable, one has to make inference about earnings capacity from the level and growth in observed wages. If workers of all education levels invest the same proportion of their earnings capacity into the production of human capital, then earnings profiles are parallel and the gap in observed log earnings between different education groups

is equal to the unobserved gap in potential earnings. If, on the other hand, workers with low education invest less in human capital than workers with high education, then the gap in observed earnings understates the gap in earnings capacity, especially early in the life-cycle when the investment occurs.

In a market economy, income inequality refers to the unequal distribution of income among individuals or households within the economy. In a market economy, where goods and services are exchanged through market mechanisms such as supply and demand, income inequality can be caused by a variety of factors, such as differences in skill, education, opportunity, and luck.

The main causes of income inequality in a market economy are:

1. Wage disparity: Differences in skill and education levels lead to variation in wage rates between people. Those with in-demand skills or advanced degrees often earn higher wages than those with less qualifications or education.

2. Capital Ownership: In a market economy, individuals who own capital assets such as property, stocks, or businesses are able to accumulate wealth and earn passive income, leading to an income disparity between capital owners and non-owners.

3. Market forces: Market fluctuations, economic cycles, and technological advances can affect wages and job opportunities differently across industries and regions and contribute to income inequality.

4. Government policies: Tax policies, subsidies, and social assistance programs can exacerbate or mitigate income inequality in a market economy, depending on how they are designed and implemented.

Income inequality can have both positive and negative effects on society. While some level of income inequality can encourage people to work hard, innovate and invest, extreme income inequality can lead to social unrest, economic instability and barriers to social mobility.

Governments and politicians often use a variety of measures to encourage a more equitable distribution of income and opportunity, such as progressive taxation, minimum wage laws, education and training programs, social safety nets, and antitrust regulations seeks to address income inequality through

The growth of income stratification during the transition from the administrative-command system to the market system is related to the fact that part of the population continues to live in the conditions of the old, rotten system, and at the same time, the creation of a functioning social stratum. according to the laws of the market economy. As a result of the involvement of more layers of the population in market relations, the scale of inequality will decrease. Various indicators are used to quantify income inequality. The level of income inequality is reflected in the Lorenz curve, in the construction of which the shares of families with the appropriate percentage of income (% of their total number) are drawn along the abscissa axis and income. the shares of the considered families (in percent of total income) are drawn along the ordinate axis. The theoretical possibility of an absolutely equal distribution of income is represented by the

bisector, which shows that any percentage of families will receive the corresponding percentage of income. This means that if 20, 40, 60 percent of families receive 20, 40, 60 percent of the total income, respectively, then the corresponding points will lie on the bisector. The Lorenz curve is a general distribution of population and related incomes. As a result, it shows the percentage of all income and the percentage of all recipients. If income is distributed equally, that is. 10% of the recipients will have one-tenth of the income, 50% - half, etc., then such a distribution will resemble the same distribution line. The uneven distribution is characterized by the Lorentz curve, i.e. the longer the actual distribution line is a straight line, the greater the variance.

The most widely used indicator (or coefficient) to express the level of income inequality in the country is the Gini coefficient. The Gini coefficient (Gini index, Gini coefficient) is used to measure the distribution of income among the population and is expressed by a number ranging from 0 (absolute equality) to 1 (absolute inequality). According to official statistics, the Gini coefficient, which began to be officially announced again in Uzbekistan in 2017, did not undergo any changes until 2020 and remained at the level of 0.26 (an indicator close to 1 is a high level of inequality, 0 and closely formed means a low level of inequality). The 2020 pandemic has led to an increase in inequality. However, after 2021, the Gini coefficient is decreasing. However, for some reasons, this trend does not mean that everything is fine with the distribution of income in Uzbekistan.

In recent years, income inequality has been evident across sectors. In particular, wages in the finance and insurance and information and communication industries are growing significantly faster than in other industries. For example, according to official statistics, in the first three quarters of 2017, the average salary in the finance and insurance sector was 1.8 times higher than the average salary in the republic, and by 2022, this difference will be 2, reached up to 6 times (in the information and communication sector, salary growth was relatively slower than in the finance and insurance sector).

On the other hand, in two important fields - education and medicine, the salary level was lower than the national average 5-6 years ago, and in recent years it has shown a further downward trend (in other words, wages in two sectors are growing slowly compared to the average wages in the country).

Thus, equality of economic opportunity is not always observed, at least for the reasons mentioned. Poor and rich exist even in the most prosperous highly developed countries. Differences in income per capita or per employed person are called income differentials. Income inequality is inherent in all economic systems. The biggest income gap was observed in the traditional system. This gap was greater than under free competition capitalism. Then, with the transition to a modern market economy, differences in income (and wealth) levels are significant decreases.

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*Shukurjonov S.U.
Kimyo international university in Tashkent branch
Namangan, the direction business
Administration (MBA) student of master*

INNOVATION ON THE BASIS OF SMALL BUSINESS ENTITIES IN WORK PRODUCTION EFFICIENCY INCREASE

Annotation. This article about the importance of achieving competitive advantage in small business today with the passing of innovations, as well as their importance in the effective activities of the organization.

Keywords: innovative, small business, management, market segmentation, economy, export.

Introduction Today's day in the enterprise production, production and market activities in the development of a new type of product, work out, innovative technologies and digital technologies introduction to essential is earned is. Long - term enterprise of effective functioning display, its competitiveness increase and development of high levels to achieve the enterprise innovative activity level by is determined.

Research

Our country's President, Shavkat Mirziyoyev's "2022 — 2026 in the year of Uzbekistan, the republic of innovative development strategy of approval on 2022 year 6 June in UP-165-the number of li to the decree according "small entrepreneurship innovative activity increasing by the territory of social-economic rapid growth to ensure, innovative business entities (industry work out of the organization), the number of its 613 than 2 250 up to far to deliver, innovative infrastructure entities (texnoparklar, technology transfer centers, innovation clusters, venchur organizations, innovation centers, business incubators and akseleratorlar) the number of 3 times to increaseh, internal and external markets for commercialization as a result of which created new innovative developments, the number of 2 times increase as the task set is given.[1]

Innovation process innovation changes the preparation and implementation of the increase is to is and single a whole constitute which are mutually connected from the circuit up I find. This process, as a result out carried o`zgarib to innovative appearing toe' ladi. Innovation the process of implementation increase to diffusion balances - new conditions and application areas of a once mastered and using, which is this innovativerni in time the distribution of very big importance has. Innovation is the process of periodic character has, in this economy, the organization of to and the management compact system working out when you take into account to take need. Jaho that economic literature "innovation" a potential scientific - technical progress (ITT)to true, new products

and technology in the realization out of cycle as interpreted is. Our country is in the news due to enter one of the problems many years for scientific - technical progress of economic studies in the framework of worked out. "Innovation" term from the uzbekistan's transition economy in both independent and also a number of similar concepts: "Innovative activity", "innovation process", "innovative decision", and so on.k. marklash for were used. Xorijlik the scientists from N. Monchev, perl i., d. v. I xart, E. Mensfield, R. Foster, B. Tviss, Y. Shumpeter, E. Rodjers and others this understanding to their own research object and the subject according to each xil interpret qiladiler, but of innovation that each xil definition of analysis such a conclusion brought kelis adi, changes to this innovativerning to himself, the specific content of the organization qiladilar, changes in function, while innovation activities, the main function is.

Austria scientists Y. Shumpeter by five typical changes in separatelgan: 1) new technology, new technological processes and production, production, new market supply use (before - buy);

2) new properties having data tatbiq to;

3) yangi raw materials use;

4) work production and its material - technical supply of organized complexity changes;

5) new sales of the market is the emergence be.

This is the rules, Y. Shumpeter by 1911 the year since formed. It innovation concept-consumer goods with new types of new work, the production and the technical means, the market established in the forms to the industry tatbiq to and of them is to use purpose in a change as interpreted was.

Innovation management is incredibly complex. Innovative jarayonlirning the development of the qonuniyat analysis make to innovative managers are the professionals necessary, they're the news, enterning each xil organizational and economic aspects with the dealing there are. Theyrning this innovativerni managing the main function - the innovation process, earlier push, probably the to'siqlirni forecast to make and theyrni eliminate to the way of a sign. [2]

"Innovation" is the word, news, new creation, new technologies or new changes with associated with all the activities, for is used. In fact, the innovative word lotin taken to be "innovative"from taken and "the news" or "development" of the meaning it represents. Innovation with associated activity of different areas when used in also, basically updates, learn, create and perform to processes means. This process of technology development, new products, creating, xdata, and then prime minister improvement, entrepreneurship and economic renewal, social and cultural development, strengthening learning and other areas, be may. Innovation, every kind in the area news and developments get to go to the opportunity it gives.

In the economy, innovation, new technologies, products, services and processes of the study, creation, and execution of processes refers to. Innovation,

new ideas, speed, due to the expansion and due to the creation on the basis of his business development for created to be can.

A directory in innovation, new business and methods, technologies, markets, products, and services, improving by enterprises development and effectiveness to increase try to represent. This activity is to facilitate, quality improve, costs kompensatsiyalash and market of the weld increase help will.

Innovation, new ideas and products that work out, new market segments, access, work activities, facilitate and work production level in increasing great importance to be able to be, of the economy development and in accordance use it for is important.

Innovation on the basis of small business entities in work production efficiency increase to the following ways of use you can:

New products and services work out to: Small business entities new products and services, working out with germination learn and they apply or existing products update they can. This trade activities expansion, new market segments, access and customers to new interested measures to learn for opportunities to create the opportunity it gives.

Technological development: Small business and technological development strengthening studied, new technology use, and with them their own business, introduction to through the effectiveness of the increase they can. This automation, the internetof platform use, lighting and foreign to the expansion of their own into gets.

Experience training boost: Small business innovation mastering to training update and in them high quality of products, production, production, and services to improve, replace, you should. This staff new technologies to learn and for them to support encouraging by practical experience and mature and to increase the opportunity it creates.

Social media and advertising: Innovation to employees, customers and other persons provide to for social media and advertising media, the use of small business for very important. This is a new products and services, post to, trade activities, expansion and customers with connecting to the possibility of it creates.

Cooperation and alliances: Small business innovations learn and them their business to the introduction in other entrepreneurs, academic institutions, and emerging technologies offer who will individuals with cooperation they can. This is mutually thoughts sharing the news to learn the capacity and expanding for good opportunities it creates.

This way, the use of small businesses for innovation, and the study and use an important role plays and their effectiveness to increase help will.

Conclusion. Innovation provides the opportunity to be campaigning and active in competition, attract customers through the unique characteristics and advantages of the enterprise itself and add value to them. The use of an innovative Tavar in competition ensures the continuous development of the enterprise and the Prevention of competition through itself.

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**ANDIJON VILOYATI O‘RMON XO‘JALIKLARI IGNABARGLI
O‘SIMLIKLARIDA FUSARIUM OXYSPORUM ZAMBURUG‘NING
TARQALISHI MONITORINGI**

Annotatsiya. Maqolada yashil xududlar atrof-muhitining muhofazaligi saqlanishida katta ahamiyatga ega, ularning o‘z rivojlanishiga katta zarar keltirishi mumkin kasalliklari monitoringi va qarshi kurash choralari bo‘yicha ma‘lumotlar berilgan.

Kalit so‘zlar: Ekologik, yashil xududlar, BMT, o‘rmon xo‘jalik, zararkunanda, kasallik, ko‘kalamzorlashtirish, zamburug‘lik kasalliklar, Fusarium, Alternaria, Botrytis, Verticillium, Pythium.

**MONITORING THE DISTRIBUTION OF THE MUSHROOM
FUSARIUM OXYSPORUM IN CONIFEROUS PLANTS OF FORESTRY
IN THE ANDIJAN REGION**

Annotation. The article provides information on monitoring and combating diseases that are of great importance in protecting the environment of green spaces, which can cause great damage to their growth and development.

Keywords: Ecological, green areas, UN, forestry, pest, disease, landscaping, fungal diseases, Fusarium, Alternaria, Botrytis, Verticillium, Pythium.

Ekologik innovatsiya va texnologiyalar, ya‘ni muhim komponentlardan biri bo‘lgan o‘simlik va hayvonot olamini qayta tiklash, saqlab qolish, tabiiy resurslarni saqlash, ijtimoiy jihatdan hududdagi aholi hayot sifatini va yashash tarzini yaxshilash, eng muhimi xalq manfaatlarini va yashash tarzini yaxshilashga yo‘naltirilgan ilmiy-tadqiqot loyihalarini kuchaytirish hamda kelajak avlodga tabiatni shu holda yetkazish, cho‘l o‘simliklaridan “yashil xududlar” barpo etishni izchil davom ettirish kabi muhim va sharaflil vazifalarni yuklaydi.

Shuningdek, **BMT bosh kotibi Antoniu Guterrish Xalqaro biologik xilma xillik kuni munosabati bilan tabiat bilan uyg‘un munosabatlarni tiklashga chaqirdi.** “Biz tabiatga urush e‘lon qildik. Biz biologik xilma xillikni saqlash borasida birorta vazifani bajara olmadik”, deb aytgan Guterrish o‘z murojaatida. Uning ta‘kidlashicha, ko‘z o‘ngimizda butun boshli ekotizimlar, nabobat olami yo‘q bo‘lib bormoqda, cho‘l hududlari esa tobora kengaymoqda,

har yil 10 mln gektar oʻrmon yoʻqotilmoqda, okeanlar plastik chiqindiga toʻlib-toshmoqda va insoniyat atrof-muhitga chiqarayotgan karbonat angidridni tobora koʻproq yutishi oqibatida oksidlanmoqda. Shu bilan birga, tabiatni muhofaza qilishga uni yoʻq qilayotgan sohalarga qaraganda kamroq pul sarflanmoqda.

Oʻzbekistonda choʻl hududlarida oʻrmon-meliorativ tadbirlarni amalga oshirish borasida **tajribalar yetarli**. Oxirgi yillarda tajribalar almashish maqsadida yuzlab **xalqaro tashkilotlar vakillari va davlatlar delegatsiyalari** bajarilgan ishlarni va ularning natijalarini koʻrish va kuzatish uchun keldilar, ushbu tabiat uchun qilingan xayrli ishlarga iliq munosabat bildirdilar.

Bundan tashqari, oʻrmon fondi yerlarida **oʻrmonlarni muhofaza qilish va qoʻriqlash** – oʻrmon xoʻjaliklarining asosiy vazifalaridan biridir.

Koʻpgina daraxtlar, ayniqsa ignabargli daraxtlar zararkunandalar va kasalliklarga taʼsirchan boʻlib, bu ularning qurishiga olib keladi. Yangi maydonlarda ekilgan qaragʻay va archalar doimiy parvarishga muxtoj.

Keyingi paytlarda shahar, qishloq va ishlab chiqarish korxonalari, ijtimoiy soha obʻektlarini obodonlashtirishga, koʻkalamzorlashtirishga katta eʼtibor qaratilmoqda. Koʻkalamzorlashtirishdagi ekinzorlar nafaqat shahar va aholi yashash joylarining koʻrinishini yaxshilaydi, balki kishilarga estetik zavq bagʻishlaydi, sanitariya — gigienik sharoitlarini ham yaxshilab, havoning salqinligini, musaffoligini taʼminlaydi. Shu bois har yili joylarda millionlab buta va daraxt turlari ekilmoqda. Ekilgan koʻchat va nihollarning koʻpgina qismi notoʻgʻri tanlanganlik, ekish va parvarishlashning belgilangan texnologik tadbirlarini amalda qoʻllanmasligi oqibatida nobud boʻlmoqda. Shu sababli ham har bir hududga mos keladigan manzarali daraxt-buta turlarini toʻgʻri tanlash, maqbul muddatlarda va usullarda ekish, parvalishlash juda katta ahamiyatga ega.

Maʼlumki, asosiy zarakunanda va kasalliklarga qarshi kurash choralari muxim ahamiyat kasb etadi Yashil hududlarga asosan bargxoʻr, soʻruvchi, tana zararkunandalar va kasalliklarda zang, qoʻngʻir dogʻlanish, un shuduring, parsha, sitosporoz zamburugʻlik kasalliklar katta zarar keltirmoqda. Hozirgi kunda tavsiya etilayotgan koʻplab usullar ichida kimyoviy kurashga muqobil variant sifatida mikrobiologik kurash usullari ham tavsiya etilmoqda.

Qayd etish kerakki, aholisi koʻp hududlarni koʻkalamzorlashtirish maqsadida igna bargli daraxtlardan keng koʻlamda foydalaniladi. Igna bargli daraxtlar oʻzining issiq-sovuq, qurgʻoqchilikka chidamliligi bilan boshqa manzarali daraxt va butalardan farq qiladi. Igna bargli daraxtlarning yaxshi oʻsishi, koʻrkam boʻlishi uchun ularni oʻz vqtida oʻgʻitlash, sugʻorish, zararkunanda va kasalliklardan himoya qilish muhim ahamiyatga ega.

<https://pubhtml5.com/jhog/owge/basic/>

Asosan daraxt mikobiotasini ikkiga yaʼni katta yoshli oʻsimliklar va nihol hamda koʻchatni zararlaydigan turlarga ajratishimiz mumkin.

Adabiy manbalarga asosan qaragʻay koʻchat va nihol fazalarida kuchli kasallik bilan zararlanadi. Oʻzbekistonda introduksiya sharoitida pitomniklarda

qaragʻayning biologik xususiyatlarini oʻrganib fuzarioz bilan kasallanishini qayd etishgan [1]. Urugʻ va nihol kasalliklaridan nihol yotib qolishi va chirishini qoʻzgʻatuvchilar tuproqda asosan saprotrof holatda oʻsimlik qoldiqlarida rivojlanish xususiyatiga ega. Bunday zamburugʻlarga *Fusarium*, *Alternaria*, *Botrytis*, *Verticillium*, *Pythium* turkum vakillari kiradi [2].

Ninabargli daraxtlarning zamburugʻli kasalliklarini aniqlashda tadqiqot ishlari Andijon, Namangan Fargʻona viloyatlarida oʻtkazildi.

Oʻsimlik tana (poyalarda), ignalarda dogʻlar va gʻuborlar, zang va soʻlish koʻproq aniqlandi, ildiz chirishi va fuzarioz kasalliklari ildizlarda qayd etilgan.

Tadqiqot xududlardagi koʻchatxona koʻchatlarida ildiz chirish (*Fusarium oxysporum*) kasalligini rivoji va zararini 2018-2020 yillari kuzatilganda Andijon viloyati, Baliqchi tumani Olimbek oʻrmon xoʻjaligi koʻchatxona maydonlarida archa daraxtlarida kasallik rivojlanishi: 2018 yildagi - 49,8%, 2019 -63,8% 2020-57 % da tashkil etilganligi aniqlangan.

Andijon viloyati Baliqchi tumani Olimbek oʻrmon xoʻjaligi koʻchatxona maydonlarida ildiz chirish kasalligiga qarshi urugʻ dorilagich preparatlari Maksim 2,5% sus.k., 1,0 va 1,5l/t, Topsin M 70% n.kuk. 1,0-1,5 kg/t, Vitavaks 200 75% n.kuk., 3,0 va 4,0 kg/t va Baraka 60% ps. 1,0 va 2,0 kg/t sarf meʼyorlarda foydalanildi.

Maksim 2,5% sus.k., 1,0 l/t sarf - meʼyorda virgin archasida ildiz chirish kasalligiga qarshi qoʻllanilganda 15 kundan soʻng zararlanishi 24,0%, rivojlanishi 9,6%, biologik samaradorlik esa 85,8% ga teng boʻldi, 1.5 l/t sarf - meʼyorda esa zararlanish 15,8%, rivojlanishi 5,7%, biologik samaradorlik esa 85,9% gacha qoʻrsatgichga ega boʻldi.

Topsin M 70% n.kuk., 1,0 kg/t sarf - meʼyorida qoʻllanilganda 15 kundan soʻng zararlanishi 23,3%, rivojlanishi 9,3%, biologik samaradorlik 73,3% teng boʻldi, 1,5 kg/t sarf - meʼyorda esa zararlanish 20,0%, rivojlanishi 8,0%, biologik samaradorlik esa 77,0% gacha qayd etildi.

Olib borgan tadqiqotlarimiz natijalariga virgin archasi urugʻlarini zararlash xususiyatiga ega boʻlgan patogenlarga qarshi yuqori samara beradigan preparatlar tanlandi. Ushbu preparatlar Maksim 2,5% sus.k., 1.5l/t, Topsin M 70% n.kuk., 1,5kg/t ekanligi aniqlandi. Ushbu preparatlarni ninabargli daraxtlarni ildiz chirish kasalliklariga qarshi urugʻlarni ekishdan oldin dorilashda tavsiya etishimiz mumkin.

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Sindarova Sh.M.
Tashkent textile Light Industry Institute
Mamarajabov M.E.
Tashkent State Pedagogical University named after Nizami

METHODOLOGICAL CAPABILITIES OF «EXPERIENCED TEACHING» OF THE DEVELOPMENT OF STUDENT CREATIVITY WITH THE HELP OF COMPUTER GRAPHICS PROGRAMS

Annotation. It is known to us that bringing creativity to a higher level and supporting will be the impetus for the development and rise of education, the emergence of innovative ideas. Clear objectives in this regard should be provided with a guide in the rock landscape and orientation. Developing the technology of creative research based on the creation of visual and problematic situations, as well as developing the method of “experienced teaching”, it is advisable to develop several methods in increasing creativity from the “science of Engineering and computer graphics” and add massively to the increase in cognitive potential.

Keywords: experienced teaching, innovative education, talent, development, problem education, ability, activity, creative.

It is the most favorable period for the beginning of the development of the entire variety of human abilities in the gradual systematic blurring of the level of knowledge based on the creation of visual and problematic situations in the formation of creativity in students through an innovative educational environment, and in the development of the method of “experienced teaching”, a person begins to develop. The more favorable conditions they are closer to the optimal, the more successful the development begins. If the onset of maturation and activity (development) is timed, synchronously leaves, and conditions are favorable, development proceeds easily - with the highest acceleration. Development can reach its peak, and the student can be talented, talented and bright.

It is recommended to use new technologies in the educational process, choose technologies according to the content of the topic, the goals of the lesson, the level of training of students, the possibilities of meeting their educational needs, the age category. The most favorable period for the beginning of the development of the entire variety of human abilities in the gradual systematic design of the level of knowledge based on the creation of visual and problematic situations in the formation of creativity in students through an innovative educational environment. The more favorable conditions they are closer to the optimal, the more successful the development begins. If the onset of maturation and activity (development) is timed, synchronously leaves, and conditions are favorable, development proceeds easily - with the highest acceleration. Development can reach its peak and be capable, talented and bright.

Loss of development opportunities is an irreversible process. The time interval between the moment of maturity of the structures necessary for the formation of creative abilities and the beginning of the targeted development of these abilities leads to serious difficulties in their development, slows down its pace and leads to a decrease in the final stage.

Currently, the urgent problem of university education is to increase the professional training of graduates of the pedagogical higher educational institution. The need for the pedagogical profession, for its creative nature, is primarily associated with its high social significance and originality - the personality of the student, which has formed his personal identity. It is precisely the perfect formation of students of the modern period that is becoming a Talb of time. It is necessary to insist that ensuring that students are free-minded, able to interpret their knowledge fluently, and paving the way will stimulate the development of the potential for creativity. To do this, it is necessary to use modern programs and, on this basis, raise the level of knowledge of students.

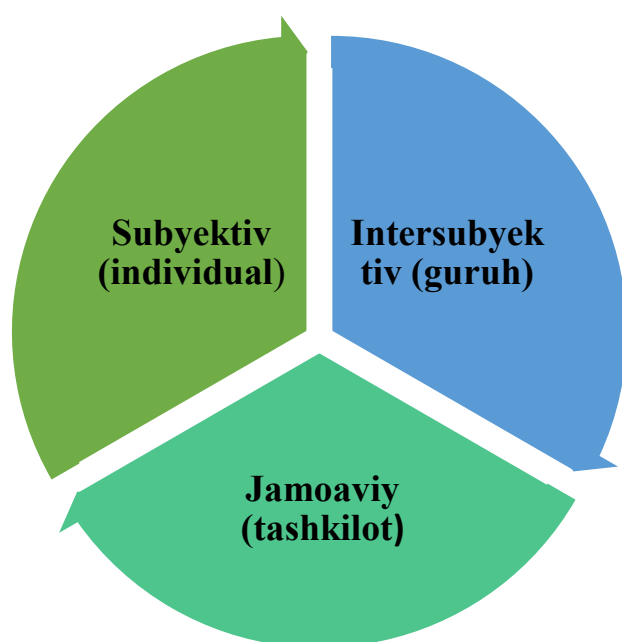
Problem education technology, like other technologies, has pros and cons. Advantages of problematic teaching technology: helps not only to acquire the necessary system of knowledge, skills and qualifications by students, but also to achieve a high level of their mental development, to form the ability to independently acquire knowledge through their creative activity; develops interest in educational work; provides the results of continuing education.

Conducting problem education technology in small groups was carried out in several stages. At the first stage, each student draws up a set of questions that are interesting to him and proceeds to search for answers to these questions. In the second stage, the members of the group give assignments to the student based on what topic it is and make a plan to complete this topic. These tasks are initiated by validation and execution between the group members. In the third stage, each member of a small group is traced in the path of completing a task that concerns himself: collected information, summarized the data, analyzed it, came to the final conclusion, exchanged views with the groupmates, revised the conclusion based on their feedback. In the fourth stage, each member of the group produced a report on the outcome of the search. At the fifth stage, a presentation of a small group is prepared based on reports. In the sixth stage, the activities of each group in the team are evaluated. Interactive teaching methods can be used purposefully. The introduction of the model in the development of creativity there is an opportunity to achieve effective results based on the method of "experienced training" and the use of several interactive techniques.

The method of "experienced teaching" helps to deeply master the science of engineering graphics on the basis of practice and strengthen the interests of students, to increase cognitive activity, to form the ability to quickly receive information (educational information).

In the process of teaching engineering graphics, the method "experienced teaching" is aimed at the gradual systematic design of the level of knowledge

based on the creation of visual and problematic situations in practice in shaping creativity in students through an innovative educational environment. As we know, the most relevant treatment and possibilities of the current day go back to raw technologies. Therefore, the most basic task is aimed at achieving creativity by properly directing existing technologies. The method of "experienced teaching" consists of three systems: personality, field of activity (general practices, values, knowledge) and teachers, that is, a society of people who carry out their professional activities in this area. In my opinion, experience is the development of a series of ideas that can be options for solving a particular problem. Based on experience and knowledge, a person chooses the most correct solutions, and it eventually becomes the final product. It also states that creative ideas can be identified by applying certain measurement parameters. Of course, to carry out such a process, not only experience and knowledge are needed, but also a number of certain abilities and qualities. The method of "experienced teaching" is indicated precisely by evidence of the validity of drawings or thought-out projects carried out in experiments, which is considered an extremely important issue in the field of engineering.



The asasiy backbone of the "experienced teaching" method is an enterprise belonging to the field of engineering, manufacturing firms, in which it is possible to obtain basic knowledge in practice. On the basis of this practical experience, they also occupy the theoretical knowledge of science. First of all, we will consider three levels of analysis in the method of "experienced training" step by step.

This approach introduced the concept of how to achieve creativity in the context of students, groups and organizations

in the creative process.

1. Subjective (individual) – perception that corresponds to the self-thought style directed at the student is thought and evidence in "engineering graphics" science aimed at achieving creativity by using effective exercises and creating a suitable environment to enrich the imagination of students. Starting with a direct instruction on the use of reasoning tools, then entering as a task that they need to know how to use tools accurately and efficiently to facilitate the formation of ideas.

2) intersubjective (group), these higher analyzes aimed at strategic creativity include: analogous thinking: situations arise and make the right decisions, comparing with specific processes that are connected to each other. It is usually the idea that creativity consists of reassembling elements in a new style from an existing knowledge base to produce a new idea.

Auxiliary personal characteristics on the method of "experienced teaching", the desire for creativity increases in originality. Such creative students manage themselves. They open up new ways of illuminating their ideas and founders and halting their attitudes. Students are encouraged to motivate to create independence and learn new things to enhance the development of self-management processes. Organization of the educational process, which is a priority in the field of accounting for these peculiarities.

In the research period, topics in small groups based on the method of "experienced teaching" ("drawing tools, objects and compounds, information about drawings", "projection methods and layout of drawings". A presentation was held on the "clear image", "views", and the result was assessed on the basis of selected criteria. The use of the "experienced teaching" method and the use of information communication technologies make it possible to achieve effective results. Personality-oriented education is also one of the most effective methods for freethinking a student and fluently expressing his opinion and ideas. In this case, the student is in the main center, the teacher puts the attitude towards the middle, and each student is required to respond positively to the mule, to find and mature words that will motivate their search. We must not forget that imagination is in the main place in each area. The science of engineering graphics in particular is considered very important in this regard.

In the process of teaching engineering graphics in educational institutions, it is required to determine the conditions and pedagogical and psychological factors for the development of student creativity. Let's compare these values in degrees.

The intermediate level – retrieval activity-separates the student from memorizing and retelling the material, making it Sample-specific.

High level-interpretive activity-this is when the student's attempt is manifested to realize the studied material, to divide it with certain concepts, to apply knowledge in a new new setting.

The highest level - activity at the level of creative search – is characterized by the interest and effort of the student to find a new solution to the issue.

The main focus should be on improving student creativity, ensuring the quality content of educational programs, introducing modern teaching aids. To organize work in these areas, it is necessary to combine the existing mechanisms of the search and support of creative students into the national system of identification and development of young talents. This requires strategies to develop engineering creativity. In addition," engineering graphics " shows the

importance of providing students with problem-solving contexts in the curriculum for creativity.

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Sultanova Z.A.
Master of International Relations and World politics
at the University of World Economy and Diplomacy

CULTURAL AND HUMANITARIAN COOPERATION BETWEEN UZBEKISTAN AND THE REPUBLIC OF KOREA

Abstract. Uzbekistan and the Republic of Korea have been fostering a deep and fruitful cultural and humanitarian cooperation, characterized by strong bilateral relations and a mutual commitment to collaboration. Through the exchange of knowledge, arts, and social initiatives, the two countries have enhanced their cultural understanding and nurtured a spirit of harmony and friendship. This article explores the various aspects of this cooperation.

Keywords: culture, diversity, relationship, international agreements, investments, organizations.

Introduction. Uzbekistan and the Republic of Korea have forged a strong partnership grounded in cultural and humanitarian cooperation. This collaboration has sparked a rich tapestry of mutual understanding, respect, and growth. Through a shared commitment to cultural exchange, the two nations have cultivated a vibrant relationship that continues to flourish.

President of the Republic of Uzbekistan Shavkat Mirziyoyev is making a state visit to this country on November 22-25 this year at the invitation of the President of the Republic of Korea, Moon Jae-in.

Successful cooperation between the countries in the humanitarian sphere has a long history. Everyone knows that Koreans, who have been living in Uzbekistan for many years, have become an integral and important part of social life.

Since 1992⁹⁴, the Korean educational center has been operating in Tashkent. The center is engaged in language learning in the Republic of Korea on a competitive basis and organization of professional development courses for university teachers and students.

Today, Korean language and culture centers are operating in the leading higher educational institutions of Uzbekistan, including the State University of World Languages of Uzbekistan, the Samarkand State Institute of Foreign Languages, and the University of World Economy and Diplomacy.

Korean language is taught as a subject in 12 universities and 28 schools and lyceums across the country.

Uzbek-Korean educational centers were established in Tashkent in 2012 and in Samarkand in 2016 based on the grant of the International Cooperation Agency of the Republic of Korea (KOIKA).

⁹⁴ Diplomatic relations between Uzbekistan and Korea (Ilyas Ismailovich Okbo'Tayev). ISSN: 2181-1385

An electronic library of oriental studies was created at the Tashkent State Pedagogical University, the Tashkent State Institute of Oriental Studies, and the International Cooperation Agency of the Republic of Korea on the basis of the free aid program of the government of the Republic of Korea.

On September 1, 2014, a branch of Korea's Inha University, specializing in computer and software engineering, logistics, was opened in Tashkent.

Also, on September 1, 2014, Seoul Park was opened in the territory of "Babur" Park of Tashkent. Today, construction work is underway to build the Korean House of Culture and Art.

Every year, in cooperation with the Ministry of Cultural Affairs of the Republic of Uzbekistan and the Embassy of the Republic of Korea in Uzbekistan, "Korean Culture Week" is held in the country. During the week, Korean film night, master classes of Korean traditional artists, art and photo exhibitions, Korean song and speech contest, Korean fashion shows will be held.

The Republic of Korea will help equip the Taekwondo Association of Uzbekistan with sports equipment and organize training sessions for athletes from both countries.

For their contribution to the development of Uzbekistan-Korea relations, 10 representatives of the South Korean government have been awarded the "Dostlik" order.

Embracing Diversity and Tradition

Uzbekistan and the Republic of Korea have embraced each other's cultural diversity and traditions, fostering a deep appreciation for the unique heritage of both nations. This open-minded approach has paved the way for meaningful cultural exchanges, allowing the people of Uzbekistan and Korea to connect on a profound level.

Humanitarian Initiatives: Fostering Compassion and Empathy

The humanitarian cooperation between Uzbekistan and the Republic of Korea has been instrumental in fostering compassion and empathy. Both nations have collaborated on various initiatives aimed at uplifting communities and promoting sustainable development. This concerted effort has not only brought tangible benefits to those in need but has also strengthened the bond between the two countries.

Education and Knowledge Sharing

Education and knowledge sharing have been pivotal in nurturing the relationship between Uzbekistan and the Republic of Korea. Through academic exchanges, research collaborations, and scholarships, both nations have enriched each other's intellectual landscape. This commitment to learning has expanded horizons and created a fertile ground for the exchange of ideas and innovation.

Building Bridges Through Art and Entertainment

The arts and entertainment industry has served as a powerful bridge between Uzbekistan and the Republic of Korea. From captivating performances to thought-provoking exhibitions, the creative exchange has ignited a cultural

renaissance, allowing the people of both nations to revel in the beauty of each other's artistic expressions.

A Shared Vision for the Future

As Uzbekistan and the Republic of Korea continue to deepen their cultural and humanitarian cooperation, they are laying the foundation for a brighter and more interconnected future. By cultivating understanding, compassion, and mutual respect, these two nations are not only enriching their own societies but also setting an inspiring example for the world.

In today's complex situation, world peace, security and stability depend on mutual trust, solidarity and friendly relations between countries and nations. Only the positive development of socio-political, cultural and economic relations can bring humanity out of today's difficult situation.

Our country, which entered the world stage as an independent country in 1991, is boldly and determinedly moving forward under the leadership of President Islam Karimov. Until now, it has been stated many times that our country is in favor of solving any conflicts, conflicts and crises by peaceful means, on the basis of universal criteria and international laws, and this position is being steadfastly defended.

South Korea⁹⁵ is another country of peace, goodness and harmony that is progressing along the same path. It should be noted that Uzbek and Korean nationalities have many similarities and commonalities. We are linguistically united by the Altai language family, and territorially we are united by one continent, one region - Eurasia and the East. Historically and culturally, many harmonies can be seen.

Like the Uzbeks, the brave Korean people were forced to live under the oppression of invaders many times in the past, and to wage a blood and life struggle against them. It is probably because of such difficulties that even in the current peaceful and prosperous environment, Koreans are distinguished by their hard work and perseverance.

After the independence of our country, on December 30, 1991, South Korea was the first among the countries of the Asia-Pacific region to recognize the independence of Uzbekistan. Diplomatic relations were established between the two countries on January 29, 1992. Since that day, the relations between Uzbekistan and South Korea have been developing successfully in every sphere in a positive spirit.

On June 19, 1992, the President of the Republic of Uzbekistan Islam Karimov paid a state visit to the Republic of Korea. This visit laid the foundation for economic, trade, cultural and technical relations between the two countries and nations. It was during this trip that the declaration "On Interstate Relations and Cooperation between Uzbekistan and South Korea" was signed.

⁹⁵ <https://journals.sagepub.com/doi/10.1177/18793665221123598?icid=int.sj-full-text.similar-articles.2>

A number of agreements were signed on trade and economic exchange, guarantees to South Korean businessmen who invest in the development of Uzbekistan's economy. Long-term plans for cooperation in the fields of culture, education, mass information, travel, and sports were determined. It was agreed with the leaders of DEU Corporation in South Korea to build a car factory in Asaka, Andijan region.

In 1992-1996, the construction and design of the Uzbekistan-South Korea joint venture "UzDEUavto" was carried out. On March 25, 1996, the first product of the plant was produced.

The scope of cooperation between our countries is trade, investment, export-import, fuel and energy, chemistry, transport and logistics, automotive industry, mining industry, light industry, food, agriculture, information technology and telecommunications, covering many fields such as medicine, tourism, science and education and culture.

Currently, 412 enterprises established in cooperation with South Korean investors, representative offices of 81 companies in this country are working in Uzbekistan. The volume of investments in Uzbekistan exceeded 6 billion dollars. The Republic of Korea is one of the main foreign trade partners of Uzbekistan. 7.8 percent of our country's foreign trade belongs to South Korea, and in 2014, the volume of mutual trade exceeded 2 billion dollars.

When it comes to the relations between the two countries, it is worth mentioning the cooperation in the field of culture and education. The Korean educational center has been operating in Tashkent since 1992. Several universities and institutes have opened Korean language and culture centers. Korean language is taught in 13 higher education institutions, 28 schools and lyceums. Universities of Uzbekistan have been cooperating with more than thirty higher educational institutions and scientific production organizations in South Korea.

To date, 14 rounds of political consultations have been held between the Ministries of Foreign Affairs of the two countries (the last one was held on November 5, 2020 in the form of a video conference). On April 17-18, 2018, the Minister of Foreign Affairs of the Republic of Korea, Kang Gyeong-hwa, paid an official visit to Uzbekistan.

Since November 2007, the annual cooperation forum "Republic of Korea - Central Asia" has been operating. In November 2020, Minister of Foreign Affairs A. Kamilov participated in the 13th meeting of the Forum.

The Republic of Uzbekistan has supported all the initiatives of the Republic of Korea in cooperation within international organizations

Conclusion

Cultural and humanitarian cooperation between Uzbekistan and the Republic of Korea has been instrumental in fostering strong ties and promoting mutual understanding. Through a variety of cultural exchange programs and humanitarian initiatives, both countries have successfully bridged the gap and built lasting relationships. It is imperative to continue nurturing these connections

for the betterment of both nations and to pave the way for a brighter future of cooperation.

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Tilabjonova S.Sh.
Chirchiq davlat pedagogika universiteti
Tarix yoʻnalishi 2-bosqich talabasi

PEDAGOGIK AMALIYOT JARAYONIDA MULTIMEDIA VOSITALARIDAN FOYDALANISHNING AFZALLIKLARI

Annotatsiya. Mazkur maqolada pedagogik amaliyot jarayonida multimedia vositalaridan foydalanishning afzalliklari, texnologiyalarining istiqbollari va dars samaradorligini oshirishda videolar, audioyozuvlar, interfaol simulyatsiyalar hamda grafika kabi zamonaviy pedagogik texnologiyalar orqali oʻqituvchi taʼlim jarayonidada turli xil uslublarni qoʻllashlari tufayli oʻquvchining darsdagi faolligini oshirish toʻgʻrisida fikr va mulohazalar keltirilgan.

Kalit soʻzlar: pedagogik amaliyot, multimedia, kognitiv, taqdimot, texnologiya, interfaol simulyatsiya, ogʻzaki, matn, dars.

Tilabjonova S.Sh.
student of the 2nd stage of history
Chirchik State Pedagogical University

ADVANTAGES OF USING MULTIMEDIA IN THE PROCESS OF PEDAGOGICAL PRACTICE

Annotation. In this article, the advantages of using multimedia tools in the process of pedagogical practice, the perspectives of their technologies and increasing the effectiveness of the lesson, due to the use of modern pedagogical technologies such as videos, audio recordings, interactive simulations and graphics, the teacher uses various methods in the educational process to increase the student's activity in the lesson, opinions and comments are presented.

Key words: pedagogical practice, multimedia, cognitive, presentation, technology, interactive simulation, oral, text, lesson.

Bugungi kunda taʼlim jarayoni raqamli texnologiyalarning keng tarqalishi tufayli sezilarli oʻzgarishlarni boshdan kechirmoqda. Taʼlim tizimida axborot texnologiyalarining jadal surʼatlar bilan joriy etilishi zamonaviy texnologiyalarning qoʻllanish sohalarini kengaytiradi. Ayni paytda taʼlimda zamonaviy axborot texnologiyalarini rivojlanayotgan yoʻnalishlarini alohida taʼkidlash mumkin. Ular quydagilar:

1. Oʻquv maqsadlaridagi dasturiy vositalarning imkoniyatlarini oʻqitish vositasi, oʻrganish asosi va axborotlarni qayta ishlash vositasi sifatida joriy etish.
2. Oʻquv-metodik majmualar yaratishda, oʻquv-namoyish asboblari va kompyuter vositalari imkoniyatlarinish integratsiyasi.

3. Multimedia tizimlarini yaratishda, kompyuterlar va audio-video axborotlarni uzatish vositalari imkoniyatlarining integratsiyasiga erishish. Bunday tizimlar o'zida dasturiy-apparat vositalar va asboblarni majmuasini mujassamlashtirib, axborotning turli (matn, grafika, ovoz, tasvir) ko'rinishlarini birlashtiradi va foydalanuvchi bilan interfaol muloqotni tashkil etad.[1., 405-407-b]. Dars davomida matn, audio, video, tasvirlar va animatsiyalar kabi turli elementlaridan foydalanish multimedia texnologiyalarining yanada qiziqarli va samarali o'quv muhitini yaratishini ta'minlaydi. Pedagogik amaliyotda multimedia vositalaridan foydalanish o'qitish va ta'lim tajribasini sezilarli darajada yaxshilaydigan ko'plab afzalliklarni bermoqda. Multimediali texnologiya (multi – ko'p, media – muhit) bir vaqtning o'zida ma'lumot taqdim etishning bir necha usullaridan foydalanishga imkon beradi: matn, grafika, animatsiya, video-tasvir va ovoz.

Multimediali ma'lumotlarni quyidagicha uch xil sinfga ajratish mumkin:

1. Vaqtga nisbatan o'zgarmas bo'lgan, shuningdek interfaol bo'lmagan statik tasvir va grafik obyektlar.

2. Vaqt bo'yicha o'zgaruvchan, harakatlanuvchi hamda interfaol bo'lgan dinamik audio, video va animatsiyalar.

3. Ko'p o'lchovli virtual reallik, 5D- va 7D- filmlar, 3D o'yinlar, tasvirlar, videolar [2.,5-6-b].

Multimediali texnologiyaning eng muhim xususiyati interfaollik – axborot muhiti ishlashida foydalanuvchiga ta'sir o'tkaza olishga qodirligi hisoblanadi. Multimedia vositalaridan foydalanishning asosiy afzalliklaridan biri shundaki, ular turli xil ta'lim uslublariga mos keladi. Ko'rgazmali qo'llanmalar, audiokliplar, videoroliklar va interfaol taqdimotlarni o'zida jamlagan holda o'qituvchilar vizual va eshitish qobiliyatiga ega bo'lgan o'quvchilarni qiziqtirishi mumkin, bu esa o'quv jarayonini yanada qamrab oladi va samarali qiladi. Taqdimotning bu xilma-xilligi esa o'quvchilarni dars mazmuniga qiziqtirishga yordam beradi.

Dinamik vizual ketma-ketlik (slyd-shou, animatsiya, video)ni ovozli tarzda namoyish etish orqali insonlarning e'tiborini ko'proq jalb qilamiz. Shundan kelib chiqib, multimediali texnologiyalar axborotni maksimal samarali tarzda taqdim etishga imkon beradi [2., 6-b]. Multimedia vositalarini ta'lim va amaliyotda qo'llash orqali o'qituvchilar hamda bo'lajak pedagoglar darslarni yanada interaktiv va amaliy qilish imkonini beradi. Undan tashqari multimedia vositalari viktorinalar, o'yinlar va virtual tajribalarni ham o'z ichiga olgan holda, o'qituvchilar o'quvchilarning faol ishtirokini rag'batlantiradigan dinamik va qiziqarli o'quv muhitini yaratishi mumkin. Richard Mayer tomonidan ishlab chiqilgan multimedia ta'lim nazariyasi ta'lim dizaynini ma'lumotni bir nechta dasturlar orqali taqdim etish, optimallashtirish mumkinligini ta'kidlaydi [3., 31-48-b]. Ushbu yondashuv inson miyasining bir vaqtning o'zida turli xil usullardan ma'lumotlarni qayta ishlash qobiliyatidan foydalanadi. Diagrammalar va animatsiyalar kabi vizual elementlar murakkab tushunchalarni aniqlashtirishi

mumkin, audio tushuntirishlar esa tushunishni kuchaytirishi mumkin. Taniqli kognitiv psixolog Jerom Brunerning fikriga ko'ra, o'rganish "faol, ikonik va ramziy tasvirlash" jarayonini o'z ichiga oladi. Multimedia bu turli xil tasvirlash rejimlariga xizmat qiladi. Masalan, simulyatsiyalar o'quvchilarga virtual muhitni boshqarish imkonini beruvchi faol tajribani taqdim etishi mumkin. Tasvirlar va illyustratsiyalar ramziy tasvirlarni, matn esa ramziy tasvirlarni taqdim etadi [4]. Ushbu hilma-xil ta'lim uslublarini qo'llab-quvvatlagan holda, multimedia chuqurroq kognitiv qayta ishlash va bilimlarni saqlashga, pedagogik amaliyot davomida bo'lajak pedagoglarning kasbiy tajriba hamda darsning sifatini oshirishga yordam beradi. Bundan tashqari, multimedia vositalari murakkab tushunchalarni soddalashtirishga va mavhum g'oyalarni yanada aniq va tushunarli qilishga yordam beradi. Animatsiyalar, simulyatsiyalar va interfaol diagrammalardan foydalanish orqali o'qituvchilar qiyin mavzularni hazm bo'ladigan qismlarga ajratishlari mumkin, bu esa o'quvchilarga materialni osonroq tushunish imkonini beradi. Bu mavzuni eslab qolish va tushunishni yaxshilashga olib kelishi mumkin. Pedagogik amaliyot jarayonida multimedia vositalaridan foydalanishning yana bir afzalligi shundaki, ular o'rganishni yanada interaktiv va amaliy qilish imkonini beradi. Viktorinalar, o'yinlar va virtual tajribalarni o'z ichiga olgan holda, o'qituvchilar o'quvchilarning faol ishtirokini rag'batlantiradigan dinamik va qiziqarli o'quv muhitini yaratishi mumkin. Bu nafaqat o'rganishni kuchaytirishga yordam beradi, balki tanqidiy fikrlash va muammolarni hal qilish ko'nikmalarini rivojlantiradi. Darslarni samarali tashkil etish nuqtai nazaridan multimedia vositalaridan foydalanish o'qituvchilarga o'z mazmunini aniq va izchil tuzishga yordam beradi. Hozirgi zamon o'qituvchisi, o'z fani bo'yicha mutaxassisligidan tashqari fanni o'qitayotganda axborot va kommunikatsiya texnologiyalarining barcha afzalliklaridan bimalol foydalana oladigan, o'quvchi va talabalarda bu texnologiyani amalda ishonch bilan fan va texnikaning mavjud yangiliklari ularni o'quv darslari va darsliklari mazmuniga jadal kiritishni talab etadi va bu orqali talabalarning zamonaviy bilimlarini shakllantirishga zamin yaratadi [5., 189-b]. Ilg'or ta'limning yetakchi tarafdori Jon Dyui o'quvchiga yo'naltirilgan ta'limning muhimligini ta'kidladi. Multimedia o'quvchilarga o'z ta'lim tajribasi ustidan ko'proq nazorat qilish orqali ushbu falsafaga mos keladi. Multimedia elementlarini o'z ichiga olgan o'quv o'yinlari va mashg'ulotlar o'quvchilarni rag'batlantirishi va o'rganishni yanada qiziqarli va foydali jarayonga aylantirishi mumkin [6., 328-335]. Multimedia inklyuzivlikni targ'ib qilish va turli xil ta'lim ehtiyojlarini qondirish uchun qimmatli vositalarni taklif etadi. Matndan nutqqa dasturiy ta'minot o'quvchilarga o'qishda qiyinchiliklarga yordam berishi mumkin, videolardagi yopiq lavhalar esa kar yoki eshitish qobiliyati zaif talaba o'quvchilar uchun foydali bo'lishi mumkin. Bundan tashqari, multimedia resurslari turli o'quv uslublariga moslashtirilishi mumkin. Vizual o'quvchilar diagrammalar va animatsiyalardan foydalanishlari mumkin, eshitish qobiliyatini o'rganuvchilar esa podkastlar yoki audiokitoblarni afzal ko'rishlari mumkin. Govard Gardnerning ko'p intellekt

nazariyasi o'quvchilarning turli kuchli va zaif tomonlariga ega ekanligini ta'kidlaydi. Multimedia bu hilma-xil intellektlarga xizmat qiladi. Kinestetik o'quvchilar simulyatsiya yoki virtual haqiqat tajribasidan foydalanishlari mumkin, mantiqiy-matematik o'quvchilar esa interaktiv simulyatsiya va ma'lumotlar vizualizatsiyasini qadrlashlari mumkin. Turli multimedia resurslarini taqdim etish orqali o'qituvchilar ta'limni farqlashlari va barcha o'quvchilarning mazmunli o'rganish tajribasidan foydalanishlarini ta'minlashlari mumkin [7., 285-294]. XXI asr tanqidiy fikrlash, muammolarni hal qilish, axborot savodxonligi va raqamli ravonlikni o'z ichiga olgan yangi ko'nikmalar to'plamini talab qiladi. Multimedia bu kompetensiyalarni rivojlantirishda hal qiluvchi rol o'ynashi mumkin. Interaktiv simulyatsiyalar talabalarni vaziyatlarni tahlil qilishga, qaror qabul qilishga va muammolarni hal qilishga undashi mumkin. O'quv o'yinlari tanqidiy fikrlash va axborot savodxonligi ko'nikmalarini rivojlantirishi mumkin, chunki o'quvchilar murakkab senariylar va tadqiqot yechimlari bo'yicha harakat qilishadi.

Multimedia vositalarini sinfga kiritishning afzalliklari ko'p qirrali. Mana bir nechta asosiy jihatlar:

1. Ishtirok etish va motivatsiyaning ortishi:
2. Multimedia o'z tabiatiga ko'ra o'ziga jalb qiladi.
3. Simulyatsiyalar, animatsiyalar va o'quv o'yinlari kabi interfaol elementlar o'quvchilar e'tiborini jalb qilishi va faolroq o'quv muhitini rivojlantirishi mumkin.

Multimedaning multisensorli tabiati turli xil o'rganish uslublariga mos keladi. Vizual o'quvchilar grafikalar, animatsiyalar va diagrammalardan foyda ko'radilar, eshitish qobiliyatini o'rganuvchilarga esa audio ma'ruzalar yaxshiroq xizmat qiladi. Multimedia vositalarining integratsiyasi o'qitish samaradorligini ko'p jihatdan sezilarli darajada oshirishi mumkin ya'ni darsni rejalashtirish va o'tkazishni soddalashtirish: Oldindan tayyorlangan ta'lim resurslari, simulyatsiyalar va interaktiv tadbirlarning keng to'plami internet saytlarda mavjud. Bu o'qituvchilarga yuqori sifatli materiallarni tanlash va qiziqarli darslarni osonlik bilan loyihalash imkonini beradi..

Umuman olganda, bugungi kunda ta'lim jarayonida interfaol uslublar, innovatsion texnologiyalar, pedagogik va axborot texnologiyalarini o'quv jarayoniga qo'llashga bo'lgan qiziqish, e'tibor kundan kunga kuchayib bormoqda, bunday bo'lishining sabablaridan biri shu vaqtgacha an'anaviy ta'limda o'quvchi talablarni faqat tayyor bilimlarni egallashga o'rnatilgan bo'lsa, zamonaviy texnologiyalar xususan multimedia ularni egallayotgan bilimlarini o'zlari qidirib topishlariga, mustaqil o'rganib, tahlil qilishlariga, hatto xulosalarni ham o'zlari keltirib chiqarishlariga o'rgatadi [8., 152-b].

Xulosa qilib shuni ta'kidlash joizki, multimedia vositalari pedagogik amaliyotni takomillashtirish uchun kuchli vositalardan biri hisoblanadi. Pedagoglar multimedia texnologiyalarining imkoniyatlaridan foydalangan holda va uning cheklovlarini tan olgan holda, ular barcha talaba yoshlar uchun yanada

qiziqarli va samarali ta'lim muhitini yaratishi mumkin. Ta'lim sifatini yanada takomillashtirishda axborot texnologiyalar sohasi rivojlanishda davom etmoqda va davom etayotgan izlanishlar natijasida multimedia vositlarining ta'limdagi imkoniyatlarini maksimal darajada oshirish juda muhimdir.

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Tojiyeva M.M.
1st year foundation doctoral student
English teacher of NIU in Navoi
Navoi State Pedagogical Institute

BLENDED LEARNING IN THE TEACHING OF ENGLISH

Abstract. Blended learning has become one of the most common ways of teaching English as a Foreign Language (EFL). Language due to its dual component, which combines face-to-face teaching with virtual learning to provide students with a wide range of methodically organised materials and resources. Over the years, teachers and students have changed the way they view this educational process, as new technologies have been introduced and teachers have had to propose new ways of working in order to provide materials to complement face-to-face EFL teaching. However, the implementation of a blended course must have a pedagogical basis for each setting in which it is to be developed.

Keywords: Blended learning, face-to-face teaching, methodology, pedagogical basis, virtual learning.

Introduction

The educational process is a daily challenge for many students and teachers. Most of the time they are participants in a 'game' in which they take on different roles; for example, EFL teachers must have to be facilitators, helping students to move through the different stages of learning a foreign language (FL) and make them aware of the importance of the resources around them in order to learning a foreign language. This means that there is not only printed material but also a wide range of technological resources of technological resources, thanks to the invention of the Internet and the technological devices that are which are used all over the world to supplement face-to-face teaching. These are virtual resources such as wikis, blogs, podcasts, emails, websites, video links, iPods, third screen devices, etc. which that enhance foreign language learning.

This paper presents an integrative view of blended learning - as it is conceived from different research experiences - and presents some important considerations regarding this pedagogical this pedagogical model. It begins with some accounts of a blended learning model proposed by proposed by Khan (2005), consisting of 8 aspects: pedagogical, technological, interface design, institutional, ethical institutional, ethical, resource support, management and evaluation. After defining what BL means and implies, we outline some previous research carried out in different countries on BL. We then present some key aspects of BL. Finally, we draw some conclusions and implications and further research on blended learning in EFL.

A blended learning model

In order to address the issue of Blended Learning (BL), we need to refer to some definitions that have been proposed for this type of process. Albrecht (2006, p. 2) states that "BL combines face-to-face classroom instruction with web-based activities". Similarly, Bersin (2004, p. 8) affirms that "blended learning is the combination of different training media (technologies, activities and types of events) to create an optimal training programme for a specific audience". Furthermore, as Bender (2003, p.6) states, "research shows that through BL, students become far more active in their own learning, feel more technologically empowered, and are able to learn anywhere, anytime, in a way that best fits their lifestyle".

Considering the above, in many educational settings, BL is a tool available to students to go beyond the classroom and engage in various interactive activities as an extension of direct instruction. With all the technological resources they have around them, students can learn about different subjects and cultures, surf the Internet and use the technological devices they have access to, such as iPods, iPads, laptops, Mp3s and Mp4s, among others.

When planning blended courses, it is important to consider all the aspects involved. The institutional aspect is the first element that teachers need to consider, as it depends on the institutional policies regarding the curriculum, the design of the material and the administrative and financial areas, administrative and financial aspects. On the one hand, teachers and students have no or very limited access to technological resources and the number of computers is very limited or the bandwidth does not work properly; these EFL teachers and students have to adapt the scarce tools they work with and plan courses that partially meet the course needs.

If teachers have a methodological plan to organise both their face-to-face classes and the online aspect.

According to Dudeney and Hockly (2007), it is important to consider some considerations for pedagogical implementation, such as delivery mode, task design, materials, learner and teacher roles, tutors, assessment and evaluation:

- Delivery mode: teachers and curriculum planners need to consider what percentage of the course will be face-to-face or online, and how and which materials will be delivered using a VLE (Virtual Learning Environment), Internet groups, email, etc. (Dudeney & Hockly, 2007).

- Task design and materials: Blended learning teachers need to consider the type of

materials, whether they are tailor-made or existing tools from the internet. It is also important that English teachers planning blended courses provide their students with a wide range of online and face-to-face activities that appeal to their students and are based on a needs analysis carried out at the beginning of the course.

- Teachers - Students: Both are the main participants in the EFL teaching and learning process. When planning BL courses, it is necessary to take into account students' and teachers' familiarity with technology and the roles of both in face-to-face and virtual classes. It is important to consider how much guidance students need from teachers and the students' previous knowledge. In addition, according to Núñez and Téllez (2009, p. 172), "the teaching process is crucial in the search for the development of materials that meet students' learning objectives and styles, preferences and expectations". When students find the appropriate resources and teachers provide them according to students' needs, learners are able to resolve their doubts and answer their own questions. These aspects can promote autonomy because students can monitor their learning process, determine their learning strategies and take responsibility for their own way of acquiring knowledge.

- Assessment and evaluation: Teachers and curriculum planners need to decide whether the course is designed to include formative and summative assessment.

In this respect, teachers need to create coherence between the institutional curriculum, the EFL curriculum and the blended learning approach. BL can be applied to different types of courses offered by the institution through curricular platforms, defined by Ariza (2004) as the basic principles underlying the construction and implementation of a curriculum.

Conclusions

Blended learning is the integration of face-to-face teaching with a virtual component where students have the opportunity to practice beyond what is taught in the classroom. So far, the research carried out in this field has shown that this hybrid learning offers students a lot of materials, resources, offline and online activities, the integration of what they learn in the classroom with what they learn on their own through the use of a virtual platform.

In addition, one of the most highlighted aspects is the fact that students can develop autonomy towards the English learning process. For example, EFL teachers can guide students through the process and also give them extra activities to do on their own; in this way, they are freer to choose what they want to see in a lesson at their own pace.

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*Toshaliyeva S.T., doctor of philosophy
in economic sciences (PhD)
docent*

*Termez State University
Abduraxmonov A.M.
student of economics
Termiz State University*

MODELING THE IMPACT OF INDICATORS OF SMALL BUSINESS AND PRIVATE ENTREPRENEURSHIP ON THE LEVEL OF WELL- BEING OF THE POPULATION

Annotation. The article modeled the effect of the size indicator of small business and private entrepreneurship in the industrial sector on the Legatum Population Welfare index. In modeling, linear, exponential and graded equations were used. The optimal model has been compiled and the Legatum index, which represents the well-being of the population, is projected to be by 2023.

Keywords: model, Legatum welfare Index, Small Business, Private Enterprise, regression, linear model, exponential model, level model.

Enter

At the current stage of socio-economic development, one of the urgent and problematic issues in the republic is the formation of a system for evaluating the effectiveness of state social policy. In practice, various indicators are used to assess the well-being of the population.

The main goal of the socio-economic development of the society is to achieve the well-being of the population. From the point of view of the World Bank, the goal of achieving population welfare is to increase the income of the bottom 40 percent of the population. Without sustainable economic growth, it is difficult to improve the living standards of the poor. However, economic growth alone is not enough to achieve prosperity. To improve overall welfare, growth must be inclusive – that is, it must reach the disadvantaged sections of the population[9].

The well-being of the population, on the one hand, is determined by the structure and level of their needs for various social benefits, which are constantly changing, and on the other hand, it is determined by the opportunities to satisfy the needs, the situation in the market of goods and services, the income of the population, and the wages of workers[1].

According to the Legatum welfare index, in 2021, the Republic of Uzbekistan took 100th place and the index value was 53.9. In 2021, it increased by 9 points compared to 2010, and by 6 points compared to 2015. The highest figure (98 places) was reached in 2020 (Figure 1). In addition, 27 high ratings were achieved in terms of social capital and 50 in terms of health. The top 5 places

in the rating are occupied by the developed countries of the world, Denmark, Norway, Sweden, Finland, and Switzerland. Among the CIS countries, Kazakhstan took 64th place, Kyrgyzstan took 90th place, Tajikistan took 110th place, and Turkmenistan took 108th place. The lowest place in the rating was occupied by the country of South Sudan, occupying 167 places.



Figure 1. Indicator of the Legatum Welfare Index of the Republic of Uzbekistan for 2007-2021⁹⁶

It should also be noted that the order of the President of the Republic of Uzbekistan dated 02.06.2020 No. PF-6003 "Improving the position of the Republic of Uzbekistan in international rankings and indexes and introducing a new mechanism of systematic work with them in state bodies and organizations" According to the Decree, measures to reflect the indicators of the republic in indicators such as the Legatum welfare index have been determined.

Analysis of literature on the topic

In 2015, the UN General Assembly adopted a document reflecting 17 sustainable development goals aimed at improving and protecting the well-being of the countries of the world. The 2030 Agenda for Sustainable Development sets the goal of ending poverty and creating healthy lifestyles for the peoples of the world, peace, prosperity and opportunity for all[15].

The concept of "quality of life" was first used by JK Galbraith in his scientific research, and he evaluated this concept as the same as the concept of "standard of living" [16]. In addition, J.K. In his scientific research, Galbraith studied economic growth and its effects on the environment, and in his writings he justified the ecological consequences of economic growth on the environment and the quality of human life.

P.D. The concepts of quality of life and standard of living are widely used in Kosinski's scientific research. But they are not the same concept. According to

⁹⁶ It was compiled by the author based on the data of the British Legatum Institute analysis center.

him, the "standard of living" reflects the level of meeting the needs of the population and its development. The concept of "quality of life" defines various (economic, social, ecological) living conditions and the state of people's use of social opportunities created by society[18].

V.T. According to Shishmakov, the concept of "quality of life" includes not only the level of consumption of material goods and services, but also the satisfaction of spiritual needs, the state of health, the life expectancy of the population, human living conditions, moral and psychological climate. It is considered as a generalizing socio-economic category containing[17].

Currently, the term "quality of life" is actively used in discussing issues of human development, determining the level of inequality, as well as comparing the well-being of the population between countries [15].

In the analysis of the quality of life of the population, general indicators reflecting the level of socio-economic development of the region are used. The level of well-being of the population can be expressed in indicators such as the size of the national income, real income per capita, as well as the unemployment rate and various indices. One such indicator is the Legatum Prosperity Index. The Legatum Prosperity Index is a comprehensive indicator of the British think tank Legatum Institute, which evaluates the achievements of the countries of the world in terms of their well-being and development. The research has been conducted annually since 2006. The index is compiled on the basis of many different indicators combined in three directions, reflecting various aspects of society and parameters of social well-being. These are: open society; openness of the economy; people's capabilities. The ranking of each country is determined by calculating the weighted average of these indicators, each of which is defined as the basis of well-being. Indicators are based on statistical analysis, social research and expert assessments of survey participants. The statistical data used in the rating were obtained from the UN, World Bank, ICT, WTO and other global organizations and international think tanks[3].

Assessing the level of well-being of the population is a complex process due to the large number of factors affecting it. T.V. Ignatov[11] tried to use the criteria for assessing the welfare of the population used by the World Bank in his research. Ayvazyan S. A. [10] developed a methodology for assessing the quality of life of the residents of the region based on the use of an integral index.

The problem of determining the relationship between the level of well-being of the population and economic indicators is one of the current research directions. Barro RJ, Banerjee AV, Duflo Ye. [14] studies are devoted to assessing the impact of inequality on economic growth. Based on the analysis of data on a group of countries, Duarte, Simcotekmes M., Andrade J. S.[15] recommended using the quantile regression method in their research to assess the relationship between the level of well-being and economic indicators.

In various literature, the factors affecting well-being are classified based on different approaches and different methodologies have been developed. S.A.

Balashova and E.O. Nakhatakyan[5] developed a well-being index based on the systematization of the existing methodologies by systematizing the widely used global well-being indices, analyzing their level of relevance and evaluating the relationship with traditional socio-economic indicators. O.A. Kislitsyna[6] analyzed the approaches to measuring the level of development and the quality (welfare) of the population's lifestyle and highlighted their importance. The author has also developed an integral index of well-being [6]. Fundamental approaches to measuring the level of social well-being of regions were discussed in the researches of M.V. Smirnov [8].

Despite the many methods of assessing well-being, the issue of determining the factors affecting it remains relevant.

Research methodology

Analysis of the validity of the influence of the indicator of the size of small business and private entrepreneurship in the industrial sector on the Legatum population welfare index, verification of the completeness of its components, between the resulting and factor indicators based on linear, exponential and rank equation econometric modeling quantitatively and qualitatively scientific assessment of dependence, as well as development of the forecast parameter of the Legatum index, which represents the well-being of the population, until 2025 based on the constructed econometric model.

Analysis and results

As mentioned above, several factors are the basis for the formation of the Legatum welfare index. From an economic point of view, it is important to assess the impact of the size of small business and private enterprise on the industrial sector. After all, small business and private entrepreneurship play a central role in the development of society, providing employment to the population, and ensuring the well-being of the population.

For this purpose, the indicators of 2010-2021 were selected for correlation regression analysis. In it, the welfare index of the Republic of Uzbekistan according to Legatum was determined as a result indicator, and the size of small business and private entrepreneurship in the industrial sector as a factor indicator (Table 1).

Table 1

Legatum Prosperity Index of the Republic of Uzbekistan and the size of small business and private entrepreneurship in the industrial sector of the Republic ⁹⁷

Years	Legatum Prosperity Index (point)	The volume of small business and private entrepreneurship in the industrial sector (billion soums)
2007	48,0	2432,4
2008	48,7	3489,5
2009	49,1	5072,3
2010	49,2	10132,9
2011	49,6	13586,8
2012	50,4	17114,6
2013	50,2	23312,0
2014	51,0	30907,0
2015	51,6	39643,5
2016	52,1	50654,5
2017	52,4	61367,8
2018	53,2	87962,0
2019	53,6	83344,2
2020	54,7	103020,8
2021	53,9	121719,2

Correlation-regression analysis was conducted in Microsoft Excel software. The results of the regression analysis are given in Table 2.

Table 2

Correlation-regression analysis results⁹⁸

T/r	Model type and regression equation	Approximation reliability coefficient	Fisher F test	Student's t test
(1)	Exponential $y = 48,995e^{9,864 \cdot 10^{-07}x}$	$R^2 = 0,9141$	$F = 138,3$	$t_a = 802,49$ $t_b = 11,76$
(2)	Linear $y = 48,975 + 5,075 \cdot 10^{-05}x$	$R^2 = 0,9201$	$F = 149,8$	$t_a = 204,27$ $t_b = 12,24$
(3)	Logarithmic $y = 35,168 + 1,583 \ln x$	$R^2 = 0,9219$	$F = 153,5$	$t_a = 27,01$ $t_b = 12,39$
(4)	Level $y = 37,379x^{0,031}$	$R^2 = 0,9293$	$F = 170,8$	$t_a = 149,84$ $t_b = 13,071$

⁹⁷ Author development based on research results

⁹⁸ Author development based on research results

From the data of Table 2, it can be seen that all models are significant according to Fisher's F test at $\alpha=0.05$ level, and their parameters are statistically significant according to Student's t test. It is known that the coefficient of determination is the part of the variance of y explained by x. The bigger it is, the better. From this, it follows that polynomial model (4) is more suitable for the economic process than other models according to the coefficient of determination ($R^2=0.9718$).

For the purpose of forecasting, we created an exponential trend equation for the factor sign:

$$x = 2704,4e^{0,277t} \quad (6)$$

(6) it was found that the exponential trend equation and all its coefficients are statistically significant at $\alpha=0.05$ according to Fisher's F criterion and Student's t criterion, and its coefficient of determination is higher than other significant trend models.

Table 2

Exponential trend equation and its coefficients⁹⁹

Years	Legatum Prosperity Index (point)	The volume of small business and private entrepreneurship in the industrial sector (billion soums)
2022	54,7	227 512,2
2023	55,1	300 132,7

Conclusions and suggestions

Having systematized well-being indices, we can say that the results of correlation-regression analysis based on the objective-subjective approach allow for the most accurate assessment of national well-being. They minimize the positive and negative features of objective and subjective approaches, and are widely used both for annual comparisons of countries and for analyzing the dynamics of indicators within a given country. Therefore, it is considered the most appropriate method for analyzing the well-being index of the Legatum Institute within the framework of an objective-subjective approach.

Based on the econometric analysis, a strong correlation was found between the size of small business and private entrepreneurship in the industrial sector and the prosperity index of the Republic of Uzbekistan according to Legatum. The reason for this is that the higher the volume of industrial production, the higher the standard of living of the population.

The relationship between the welfare index and the size of the business in the industrial sector is very close for all groups of countries, and this evaluation method can be used at the level of the country and region.

⁹⁹ Author development based on research results

Thus, Legatum's well-being index can be used to assess national well-being, as it represents an appropriate assessment of the well-being of countries, taking into account socio-economic indicators.

The approaches presented in the article are an important step towards analyzing the validity of the impact of the indicator of the size of small business and private entrepreneurship on the Legatum index of population well-being, the success of further research in this area, subjective perception of well-being and can be seen by forming a complex index that combines objective indicators of social development.

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*Toshbekov N.A.
tabiiy fanlar kafedrası o'qituvchisi
Jamshdov D.R.
tabiiy fanlar kafedrası magistranti
Buxoro Davlat Pedagogika Isntituti*

BUXORO VILOYATI SUV RESURLARIDAN SAMARALI FOYDALANISHNING ILMIY ASOSLARI

Annotatsiya. Ushbu maqolada muallif tomonidan hozirigi kunda qishloq xo'jaligida mavjud bo'lgan suv resurslaridan samarali foydalanish va sug'oriladigan yerlarning meliorativ holatini yaxshilash bo'yicha fikr mulohaza yuritilgan.

Kalit so'zlar: Buxoro vohasi, suv resurslari, kollektor-zovur, sug'oriladigan maydonlar, landshaft, yaylov, tuproq unumdorligi.

*Toshbekov N.A.
teacher
department of natural sciences
Jamshdov D.R.
graduate student
Department of Natural Sciences
Bukhara State Pedagogical Institute*

SCIENTIFIC BASES OF EFFECTIVE USE OF WATER RESOURCES IN BUKHARA REGION

Abstract. In this article, the author examines the issues of effective use of water resources available in agriculture today and improvement of land reclamation.

Key words: Bukhara oasis, water resources, collector-zovor, irrigated areas, landscape, pastures, soil fertility.

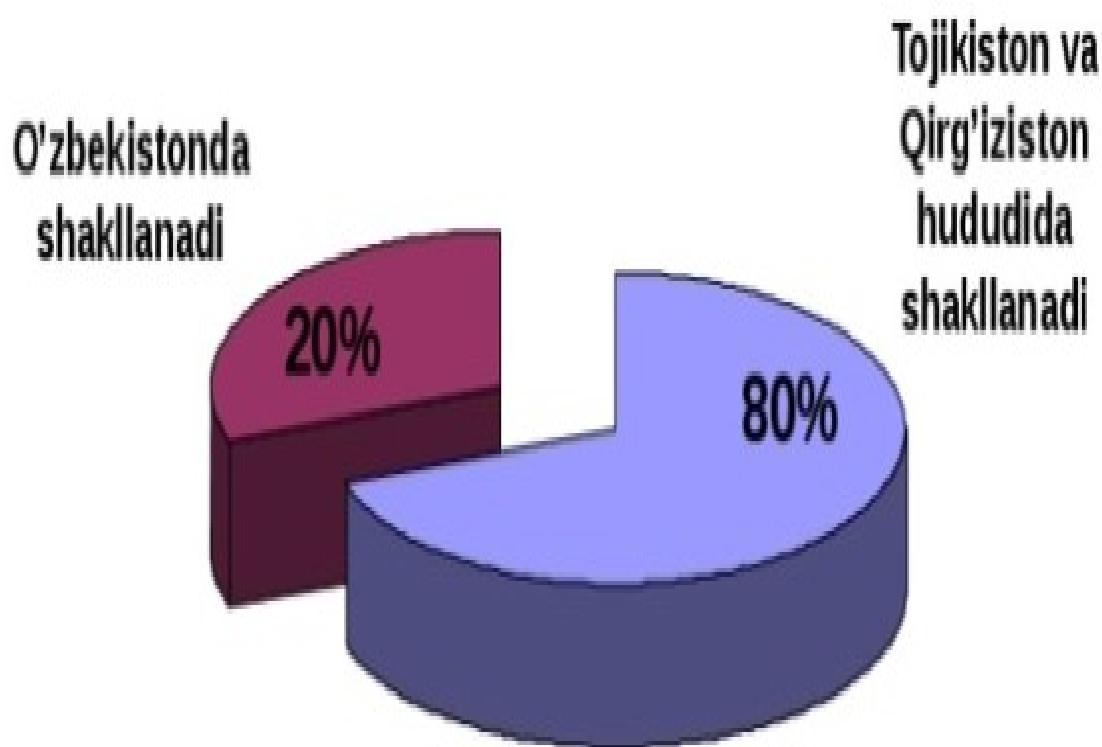
Kirish. Keyingi yillarda mamlakatimizda qishloq xo'jaligida mavjud suv resurslaridan samarali foydalanish, sug'oriladigan yerlarning meliorativ holatini yaxshilash, tuproq unumdorligini oshirish va qo'shimcha suv manbalarini shakllantirish bo'yicha bir qancha tadbirlar amalga oshirilmoqda. Suv resurslaridan foydalanishda zamonaviy bozor mexanizmidagi, innovatsion resurs tejoychi texnologiyalarni joriy etish, past hosilli paxta va g'alla maydonlarini qisqartirish hisobiga yuqori daromadli eksportbop mahsulotlar yetishtirish bo'yicha tizimli chora-tadbirlar amalga oshirilmoqda.

O'zbekiston Respublikasi Prezidentining 2022 yil 28 yanvardagi PF-60-son «O'zbekiston Respublikasini 2022-2026 yillarga mo'ljallangan Yangi

O‘zbekistonning taraqqiyot strategiyasida, «Suv resurslaridan samarali foydalanish hisobiga 7 milliard kub metr suvni iqtisod qilish va sug‘oriladigan yerlarning meliorativ holatini yanada yaxshilash, qishloq xo‘jaligi ishlab chiqarish sohasiga intensiv usullarni, eng avvalo, suv resurslarini tejaydigan zamonaviy agrotexnologiyalarni joriy etish¹⁰⁰» bo‘yicha muhim chora-tadbirlar belgilab berilgan.

Mavzuga oid adabiyotlar sharhi. O‘zbekiston Respublikasi hududi Markaziy Osiyoning qirg‘oqchil zonasiga kiradi. Hududning 70 % ni cho‘l va chala cho‘llar egallagan. O‘zbekiston Respublikasining tabiiy geografik joylashuvi bo‘yicha ikkita katta sahro Qizilqum va Qoraqum vohasigacha cho‘zilgan. Suvning tanqisligi mamlakatning xarakterli xususiyati hisoblanadi. Mamlakatda suvning asosiy qismi sug‘orma dehqonchilikga to‘g‘ri keladi.

Respublikada foydalanilayotgan jami suv resurslarining 20 foizi mamlakat ichkarisida qolgan, 80 foizi esa qo‘shni Tojikiston va Qirg‘iziston hududida shakllanadi.



O‘zbekiston Respublikasi hududida suv resurslarining shakllanish ko‘rsatkichlari.

Buxoro viloyati Respublikaning janubiy g‘arbida, Zarafshon daryosining quyi va o‘rta qismida joylashgan bo‘lib, shimoliy-g‘arb tomondan qisman Amudaryo bilan Turkmaniston Respublikasi, janubiy-sharqdan Qashqadaryo

¹⁰⁰Ўзбекистон Республикаси Президенти Ш.М.Мирзиёевнинг 2022 йил 28 январдаги “2022-2026 йилларга мўлжалланган янги Ўзбекистоннинг тараққиёт стратегияси тўғрисида”ги (PF-60 сон 31 мақсад, 1-илова) Фармони.

viloyati, shimoliy-g'arbdan Navoiy viloyati, shimoliy-sharqdan Xorazm va Qoraqalpog'iston Respublikasi bilan chegaralangan.

Viloyatning umumiy yer maydoni 4 mln 200 ming gektardan iborat bo'lib, sug'oriladigan maydonlari 274.60 ming.gektar, shulardan 20909 gektar (0,5%) bog'lar, 2674186 gektar (63,77%) yaylovlar, 205616 gektar (4,9%) O'rmonzorlar va 1002295 gektar (23,9%) boshqa yer maydonlari tashkil qiladi, qolgan 6,9 foiz yer maydonlarini tashlandiq yerlardir.

2-rasm.



Buxoro viloyat tumanlarining geografik xaritasi.

Sug'oriladigan tekisliklar mintaqasi Janubiy Qizilqum sahrosida joylashgan bo'lib, Zarafshon daryosining qirg'oqlaridagi yerlar bilan birgalikda Buxoro va Qorako'l vohasigacha cho'ziladi. Buxoro-Qorako'l vohasi Zarafshon daryosining qadimgi va hozirgi zamon del'tasiga va uning atrofidagi erlarga joylashgan sug'oriladigan yerlar, Qorovulbozor, Buxoro va Qorako'l kabi o'ziga xos vohalarda joylashgan va qadimdan sug'oriladigan yerlar maydoniga to'g'ri keladi.

Qorovulbozor vohasi tog' oldi mintaqasiga Zarafshon daryosining yuqori oqimida joylashgan va Zarafshon daryosi sizot suvlari uchun zovur vazifasini bajaradi; Buxoro vohasi esa havzaning markaziy qismida joylashgan, Zarafshon daryosining del'tasini tashkil qiladi. Bu yerda daryoning erozion kesimi 3,0-8,0 metrni tashkil qiladi. Vohaning chap qirg'og'ini o'rab turgan saxro yerlarining chap qirg'oqdagi relyefi Quyi-Mozor, Xo'ja-Kab, Kunja-Ko'l kabi qadimiy erozion chuqurliklar bilan o'ralgan. Birinchi chuqurlikdan Zarafshon daryosi va Amu-Buxoro kanali suvlarini to'playdigan suv ombori sifatida foydalaniladi [2].

Qorako'l vohasi daryoning quyi deltasida va past gipsometrik balandliklarda joylashgan. Qorako'l vohasi Buxoro vohasidan Qizilqum platosimon balandliklari bilan chegaralangan.

Buxoro viloyati ichki havzaga kiradigan o'lkalardan bo'lib, subtropik va mo'tadil iqlim mintaqalarining shimoliy chegarasida joylashgan. Hududning iloyatning geografik jihatdan bunday bo'lishi iqlimning shakllanishiga ta'sir ko'rsatadi. Umuman Buxoro viloyati iqlimi yozda quruq tropik havo massalari ta'sirida, qishda esa shimoldan mutadil kengliklardan keladigan salqin havo massalari ta'sir ostida shakllanadi.

Geologik nuqtai nazardan hududi egarsimon strukturada joylashgan va qalinligi 400 metrga etadigan kontinental yotqiziqlar bilan to'ldirilgan. Ular hamma yerda keng tarqalgan paleogen davrning gillari ustida yotadi. Paleogen davri gillari, pastda joylashgan bo'r qumtoshlari davri uchun suv o'tkazma qatlam vazifasini bajaradi, qatlam sersuvligi bilan farq qiladi va bosim ta'sirida yer yuziga o'zi oqib chiqadi. Tarkibi sulfatli, minerallashtirilganligi 2-3 g/l ni tashkil qiladi.

Tadqiqot metodologiyasi.

Respublikamizda minerallashtirilgan suvlardan foydalanish miqdori yilning suv bilan ta'minlanganlik darajasiga bevosita bog'liq hisoblanadi.

Buxoro viloyatidagi sug'oriladigan yerlar meliorativ holatini yaxshilashda kollektor-zovur tarmoqlarisiz tasavvur etib bo'lmaydi. Shu maqsadlar uchun viloyat bo'yicha hozirgi kunda umumiy uzunligi 8851.60 km bo'lgan kollektor-zovur tarmoqlari qishloq xo'jaligi va foydalaniladigan yerlar uchun xizmat qiladi.

3-rasm.



Suv resurslarining joylashish xaritasi.

Tumanlararo Markaziy Buxoro kollektori - Buxoro viloyatida qurilgan eng yirik gidrotexnika inshootlaridan biridir. 1955 yilda Markaziy-Buxoro kollektori Vobkent tumanidan Zarafshon daryosining eski o'zani Duob gidrouzelidan Moxanko'l kollektorigacha bo'lgan o'zanini chuqurlashtirib,

kengaytirilib ishga tushirildi. Markaziy Buxoro zovurining uzunligi 95.1 km bo'lib, suv o'tkazish qobiliyati $80 \text{ m}^3/\text{s}$ ni tashkil qiladi [5].

4-rasm.

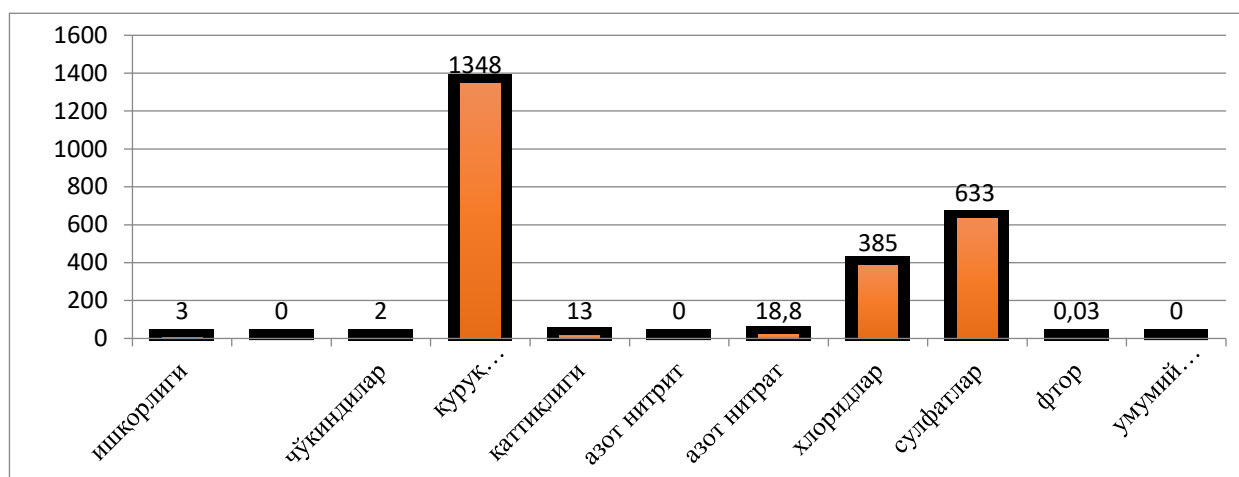


Markaziy Buxoro zovur suvidan namunalar olish jarayoni.

Markaziy Buxoro kollektoriga Buxoro, Jondor, Vobkent va Romitan tumanlari hududidagi kollektor-drenaj tarmoqlarida yig'iladigan sizot suvlar tashlanadi. Kollektorning umumiy suv yig'ish maydoni 64.6 ming ga.

Markaziy-Buxoro zovuriga viloyatdagi 80 ga yaqin xo'jalik ichki va xo'jaliklararo kollektor suvlari qo'yiladi. Markaziy-Buxoro zovuri viloyatdagi 1200 gektar maydonga xizmat qiladi [4].

Markaziy Buxoro zovuri suvining tarkibidan natijalar olinganda quyidagilar aniqlandi.

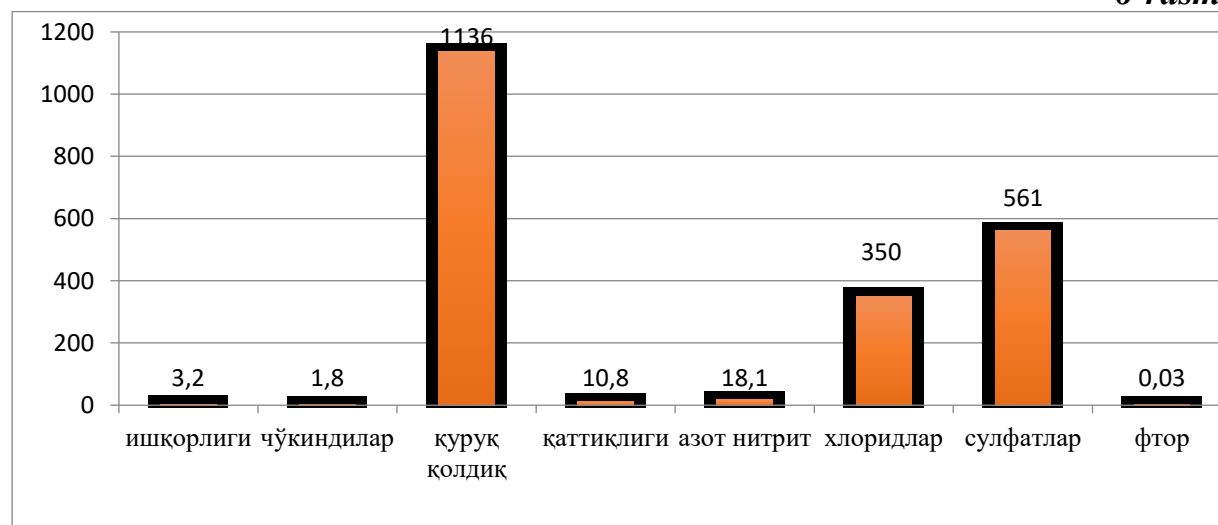


Markaziy Buxoro zovur suvining tahlil natijalari.

Markaziy Buxoro zovuridan oqib o'tayotgan suvning tarkibidagi loyqaligi 1 litr suvda 2 milligrammni tashkil qildi. Markaziy Buxoro zovuri suvining ishqoriyligi 3.0 milligramm. 1 litr suvdagi quruq qoldiq 1348.0 mg/dm³, umumiy qattiqligi 13.0 mg/dm³, va azot nitrit 18.8 mg/dm³, shuningdek, xloridlar 385.0 mg/dm³, sulfatlar 633.0 mg/dm³, fтор 0.003 mg/dm³ ni tashkil qildi.

Suv tarkibida azot ammoniy miqdori kuzatilmadi. Mahalliy moddalarga xos bo'lgan maxsus moddalar (fosfat, mis, qurg'oshin, sink) kabi moddalar miqdori Markaziy Buxoro zovurining suv tarkibida aniqlanmadi.

Shimoliy magistral zovuri. Shimoliy tumanlararo zovuri 1948 yil ishga tushirilgan. Uzunligi 139.9 km ni suv o'tkazish qobiliyati 56.5 m³/s ni tashkil qiladi. Shimoliy tumanlararo kollektori viloyatdagi G'ijduvon, Shofirkon, Rometan, Peshku va Vobkent tumanlaridagi ekin maydonlarida hosil bo'ladigan sizot suvlarni olib chiqib ketadi. Shimoliy zovur suvidan olingan natijalar quyidagi elementlar aniqlandi.



Shimoliy zovur suvining kimyoviy tarkibi

Shimoliy tumanlararo kollektor suvidan namuna olinib, Buxoro viloyati Ekologiya va atrof muhitni muhofaza qilish qo'mitasining laboratoriyasida tekshirildi. Suvdagi ishqor moddalar 3,2 mg/l, cho'kindilar 1,8 mg/l, quruq qoldiq 1136 mg/l, suvning qattiqligi 10,8 mg/l, azot nitrit 18,1 g/l, xloridlar miqdori 350 mg/l, sulg'fatlar miqdori esa 561 mg/l, ftor 0,03 mg/l va boshqa elementlarining miqdori aniqlandi.

Oyoqog'itma zovur. Oyoqog'itma tumanlararo zovuri 1969 yil ishga tushirilgan. Oyoqog'itma tumanlararo zovurining uzunligi 68.7 km ni suv o'tkazish qobiliyati 100 m³/s dan iborat. Oyoqog'itma tumanlararo zovuri viloyatdagi Shofirkon, G'ijduvon tumanlaridagi qishloq xo'jaligi ekin maydonlarida hosil bo'ladaigan qaytarma suvlarni to'plab, suvini Oyoqog'itma ko'liga tashlaydi. Natijalar shuni ko'rsatmoqdaki, G'ijduvon, Shofirkon tumanlaridagi fermer (Olimbobo) xo'jaliklarida Oyoqog'itma zovuri suvini yig'ib, nasoslar yordamida qishloq xo'jaligida sho'r yuvish va vegetatsion sug'orishda foydalanilmoqda. Zovur suvi vegetatsiya va sho'r yuvish vaqtida sug'orish suvining asosiy qismini tashkil etib, yangi yerlarni o'zlashtirish hisobiga sug'oriladigan maydonlarni kengaytirish, eskidan sug'orilib kelinayotgan yerlarni suv bilan ta'minlashni yaxshilash uchun qo'shimcha manba hisoblanadi [7].

Viloyatdagi mavjud kollektor-zovurlardagi suvlarining sho'rlik kimyoviy darajasi har yili o'zgarib turadi. Buning asosiy sababi ob-havoning issiq kelishi, hamda sug'orishga berilgan suvning tarkibi va tuproq tarkibining sho'rlik darajasi yuqori bo'lganligidir. Qorako'l va Olot tuman hudularidagi sug'oriladigan yerlardan chiqadigan sizot suvlariining sho'rlik darajasi juda yuqori bo'lib, o'rtacha 5,902 gr/litr ni tashkil etadi. Bu mintaqadan chiqadigan sizot suvlar "Bosh Qorako'l", "Dengizko'l" kollektorlari orqali Dengizko'l tashlamasiga yuboriladi.

Buxoro, Kogon, Jondor tumanidagi sug'oriladigan yerlardan chiqadigan sizot suvlar "Parallel", "Markaziy Buxoro" va "G'arbiy Romitan" kollektorlari orqali chiqarib yuborildi. Sug'oriladigan yerlarga beriladigan suvlar va atmosferadan keladigan yomg'ir hamda sizot suvlarningharakati nihoyatda kam bo'lganligi natijasida suv tuz muvozanatini buzilishiga sabab bo'ladi.

Buxoro viloyatida sizot suvning oqim yo'nalishi g'arb, shimoliy g'arb hamda janubiy g'arb tomonga bo'lib, nishabning kichikligi tufayli sug'oriladigan hududlardan chiqib ketmaydi. Markaziy Buxoro, Oyoqog'itma va Shimoliy kollektor-zovurlardan suv miqdori va uning tarkibi o'rganilganda qo'yidagilar aniqlandi.

Xulosa.

Buxoro viloyatida jami sug'oriladigan erlar 274,60 ming gektar bo'lib, asosan Amudaryodan Amu-Buxoro mashina kanali orqali va qisman Zarafshon daryosi suv resurslaridan foydalanadi. Sug'orish maqsadida bir yilda qishloq xo'jaligi uchun jami 4.1-4.3 mlrd m³ suv resurslari ishlatiladi.

Sug'oriladigan maydonlardan har yili kollektor-zovurlar orqali 1.9-2.1 mlrd m³ suv olib chiqib ketiladi. Suv tanqis bo'lgan yillarda ularning 60-61 % ini

sug'orma dehqonchilikda qayta ishlatish, 5.2-5.3 % ini daryo suvlari bilan qo'shib qishloq xo'jalik ekinlarini sug'orishda foydalanish orqali suv tanqisligining salbiy oqibatlarini olish mumkin. Ilmiy tadqiqot natijalari viloyat suv resurslarini muhofaza qilishda va ulardan oqilona foydalanishda muhim omillardan hisoblanadi.

2. Buxoro vohasining geologik tuzilishi va rel'yefi boshqa hududlardan sezilarli darajada farq qiladi va uning iqlimiy va gidrologik sharoitlarini belgilaydi. Vohaning iqlim sharoiti atmosfera yog'inlarining ahamiyatsizligi bilan ajralib turadi. Havо haroratining yuqoriligi gidrologik va gidrogeologik nuqtai nazardan juda noqulay omillardir. Bular birgalikda hududdagi oqova suvning miqdori va sifatiga tahsir qiladi.

3. Kollektor-zovur tarmog'ibilan suv tanqis bo'lgan sharoitda o'simlikning suvga mineral va organik o'g'itlarga bo'lgan talabini qondirish, hosildorlikni saqlab qolish, suv resurslaridan oqilona foydalanish, mineral o'g'itlarga bo'lgan talabning kamayishi hisobiga fermer xo'jaliklarining iqtisodiy ahvolini yaxshilashga, etishtirilayotgan hosil tannarxini asaytirish, oziq-ovqat xavfsizligini tahminlash va ekologik toza mahsulotni etishtirish hamda sug'oriladigan ekin maydonlarning qishloq xo'jalik muomilasidan chiqishning oldini olish imkonini beradi.

4. Buxoro viloyati tumanlaridagi fermer xo'jaliklarida Markaziy Buxoro, Shimoliy va Oyoqog'itma zovurlaridan suvni nasoslar yordamida qishloq xo'jaligida sho'r yuvish va vegetatsion sug'orishda foydalanilmoqda.

Zovur suvlari vegetatsiya va sho'r yuvish vaqtida sug'orish suvining asosiy qismini tashkil etib, yangi yerlarni o'zlashtirish hisobiga sug'oriladigan maydonlarni kengaytirish, eskidan sug'orilib kelinayotgan yerlarni suv bilan tahminlashni yaxshilash borasida qo'shimcha rezerv hisoblanadi.

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METHODS OF COMBATING DISEASES OF FRUIT TREES

Abstract. The efficacy of fungicide spraying against peach leaf curl disease at leaf fall stage in autumn has been evaluated in the conditions of the Andijan region in field experiments. The biological efficacy of difenoconazole (Rayok 25EC) and kresoxim-methyl (Ustroby 50WDG) was the highest and amounted, respectively, 86-93% and 85-89%. The efficacy of the complex formulation copper chlorine oxide + cymoxanil (Ordane 73WP) and penconazole (Topoz X 10EC) was lower and equaled 65-70% and 65-79%, respectively.

Key words: peach, leaf curl, Taphrina deformans, control, fungicide, difenoconazole, kresoxim-methyl.

Diseases and arthropod pests (insects and ticks) always coexist in all crops. For this reason, both of the above systems are practically a single, complex system, which is applied together in the field or garden and includes the fight against all pests in the crop. Its common name is the Integrated Disease and Pest Management System (IDPM; sometimes abbreviated as IPM). When developing a control program to achieve the highest biological and economic efficiency in disease control, it is necessary to have all relevant information about the crop, pathogens, disease history of previous seasons, disease resistance of the variety, expected weather conditions, growing location and costs are given. In some cases, if the crop is at risk of a specific underlying or single disease (e.g., apricot klyasterosporiosis or peach leaf wilt disease), a IPS program is designed to plan to combat that source of risk. IP systems imply the following.

1) to determine the incidence and development of disease species in plants; loss of primary inoculum in the crop or reduction of its quantity and effect;

2) not to eradicate pathogens, but to keep their quantity at a level that does not cause economic damage to the crop, while ensuring that the negative impact on the environment is minimal;

3) ensuring a high level of agricultural technology for the cultivation of plants that are resistant to adverse conditions and complete, including the application of special agro-technical measures that reduce the number of particularly harmful phytopathogens;

4) increase the resistance of the host plant; planting of disease-resistant and pest-resistant (tolerant) crop varieties; delay the onset of the disease; reducing the number of pathogen-producing offspring by slowing disease progression;

5) regulation (reduction) of the number of phytopathogenic organisms and selection and application of means and methods that not only stop, but also

activate their activity, while maintaining the number of natural antagonistic microorganisms;

6) implementation of effective measures to reduce the amount of pests, primarily the use of biological and chemical agents after a detailed analysis of the agrobiocenosis and an objective determination of the expected level of disease development.

The methods used in IPS should not harm beneficial organisms in nature. One of the important conditions of IPS is the use of disease prevention methods as much as possible and the creation of unfavorable conditions for the emergence and development of the disease.

Thus, IPS is the most optimal combination of biological, agrotechnical, chemical, physical and other methods recommended against a complex of diseases (and pests) in a particular ecological-geographical region, a particular crop type, which, while maintaining the number of beneficial natural organisms, phytopathogen a system aimed at reducing the number of organisms to a level that does not harm the farm.

The IP system is prepared separately for each crop type grown in a particular region, taking into account the specific characteristics of the region and crop type and other conditions. Applying the IP system scheme prepared for one ecological-geographical zone mechanically in another region does not give good results.

Successful application of the IP system in practice involves the use of agrotechnical preventive methods, primarily disease-resistant varieties. Cultivation of such varieties not only reduces the number of chemical treatments, but also radically improves the ecological condition of agrobiocenoses, reduces pollution of the environment and agricultural products with pesticide residues. Adherence to crop rotation schemes, planting times, tillage, and fertilizer application rules can often protect plants without the use of chemical methods.

Chemical, biological, physical and other methods aimed at actively reducing the number of pests in the IP system are applied taking into account the expected level of development of these organisms, the planned yield, "threshold criteria" of phytopathogenic organisms and economic damage.

The use of a IP system rather than the use of a separate control measure ensures that the economic performance of phytosanitary measures is high, while environmental requirements are fully met, and adverse effects on natural agrobiocenoses and nature in general are minimal (Popkova et al., 2005; Agrios, 2008; Alston et al., 2012 and b).

The most important element of IPS is that the specific information collected about the presence of a particular disease (and pest), when it occurred, and at what stages of development were observed, is recorded in a special workbook - a diary. This book also includes important, detailed information about the fungicides used against the disease, the prevalence and development of the disease during treatment, the biological and economic efficiency obtained as a

result of treatment. These data can serve as a basis for short-term (weeks, months) forecasting of disease and pest development and selection of the most optimal control measures against them (Hetherington, 2005).

In order for the seedlings to grow, develop and not get sick until they start to bear fruit after transplanting, it is necessary to feed them with fertilizers in a timely manner, watering, bushing and treating them against pests and diseases common in this region. It is necessary to pay more attention to the period of fruiting of trees, to take measures to combat any disease that occurs in them. All trees with diffuse disease caused by a systemically developing pathogen (e.g., virus, phytoplasma) in the body should be dug up and destroyed as soon as possible.

In gardens, the fight against diseases (and pests) can begin during the winter, when it is necessary to pick up, burn, or bury the weak, diseased or dead twigs, branches and hanging fruit. This measure will reduce primary sources of infection by phytopathogenic fungi and bacteria next spring. For this purpose, the garden should also collect and remove fallen leaves, fruits and twigs, or spray the soil with fungicides or biological control agents. Each time after processing (before processing a new tree) it is necessary to disinfect the work tools with a special liquid. Shrubs should be sprayed with one of the fungicides as soon as possible (such as benomyl) to prevent cancer-causing fungi from entering the scars.

Many fungi and bacteria (as well as insects and canals) are also active in the weather during spring budding, so trees should be treated with a fungicide-bactericide or other simple fungicide and insectoacaricide mixture, such as Bordeaux liquid, before the buds burst. Later, when the buds open, usually the flowers and leaves become very resistant to pathogenic fungi and bacteria. For this reason, they should be sprayed again with a fungicide and / or bactericide, and possibly with an insect acaricide that is harmless to bees, in the form of a tank mixture. If it is not possible to mix the pesticides, each of them should be sprayed separately. During this period, when flowering lasts several days, when new flowers continue to open, and when the leaves grow rapidly, many fungi release spores into the air, and bacteria also spread in large numbers by rain and wind; during this period, flowers and leaves may need to be protected with a systemic fungicide. If only a protective fungicide (or bactericide) is available, the trees should be treated once every 3-5 days. If the fungicide still needs to be added insectoacaricide, it should not be poisonous to pollinating bees. The longer the weather conditions are maintained and the longer the plant tissue continues to grow, the longer the regular treatments with pesticides should be continued. In this case, processing times are based on weather forecasts. In developed countries, computer programs are used to determine when to start gardening and how often and when to continue (Hetherington, 2005; Agrios, 2008; Bazdyrev et al., 2014).

Fruits are often resistant to certain staining and rot-causing fungi from the time of ripening to the time of harvest as well as during storage. For this reason,

the fruits need to be sprayed with appropriate fungicides every 10–14 days before harvest. These fungi often enter the fruit from areas damaged by insects, so insecticide spraying is also continued. To protect the fruits from damage, they should be carefully picked and placed in containers. Containers used for picking fruits should be clean, free of rotten debris, packaging and warehouses should be clean, disinfected with formalin, sulfur dioxide or any other fumigant. In many countries, harvested fruit is washed with water containing a fungicide or biological agent, and this measure protects the fruit from damage during storage and transportation. Before packing, the damaged and damaged fruit is separated and discarded. Fruit warehouses, transport used for transportation and storage containers should be refrigerated during the period of sale (Agrios, 2008).

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Turdiyeva M.
intern-teacher of the institute
Andijan agriculture and agrotechnologies

PESTS OF POLICE CROPS AND MEASURES TO CONTROL THEM (EPILACHNA CHRYSOMELINA)

Abstract. As with all representatives of the plant world, protection from pests, diseases, and weeds that disrupt the high productivity and physiological processes of rice crops in agriculture remains an urgent topic. In this article, information about dangerous pests of citrus crops (melon, watermelon, cucumber, pumpkin) and effective measures to fight against them are highlighted.

Key words: beetle, fungus, larva, polysis, biology, ecology, imago, oligophagous, upper hairs, kakana, paykal.

In the decisions of the President of the Republic of Uzbekistan and the Cabinet of Ministers, it was emphasized that special attention should be paid to the expansion of cultivated areas and increasing their productivity in order to continuously provide the population of the Republic with high-quality poliz products, and for the purpose of efficient use of the lands where poliz crops are grown.

Due to the fact that the climatic conditions of Uzbekistan are favorable for the increase of pests that harm the crops, various pests are observed in the crops. In some years, as a result of their damage, the weight and quality of melons, watermelons, pumpkins, and cucumbers are reduced to a certain extent in all regions of our republic. Such a group of dangerous pests is the polyz beetle, epilyachna, aphids, root-gnawing tundra, melon fly, nematode causing swelling, rotting nematode.

Polyz beetle or epilyakhna - oligophagous. (*Epilachna chrysomelina*) mainly belongs to the Coccinellidae family of the Beetle family.

It is found in Central Asian countries and in the Caucasus. Spread abroad in Afghanistan, Iran, Asia Minor, South Europe, and partly in Africa, the Uzbek beetle can be found in the Surkhandarya, Kashkadarya, Bukhara, and Samarkand regions. This plant-eating coccinella beetle can be identified immediately because of its specific symptoms. The beetle has a semicircular shape and is 1.75 mm in size. The larva is yellowish in color, has three pairs of thoracic legs, and has five rows of branched black spines on its upper side, 9 mm long. The bulb sticks to the leaf with its back end typical of coxellids, the body is narrowed and widened, the top is covered with hairs, the color is yellow.

Forgiveness: The beetle hibernates in the place where it lives under the remains of various plants. It was also found in reed stalks. The awakening of the beetles in the spring is much longer and coincides with the period of flowering of poliz crops. Beetles fly to the crops and feed on them, they lay 20-50 eggs on the

upper side of the plant leaves. After another 3-5 days, larvae emerge from them and begin to feed on leaf tissue. After molting three times in 15-25 days, the larvae pupate between the leaves. After 8-10 days, new joints will be confused with each other, and it will be possible to meet different forms of the pest at the same time. The third joints are confused, and it is possible to meet different forms of the pest at the same time. Third instar beetles hibernate. The polyz beetle itself and its larvae are oligophages that damage melons, watermelons, pumpkins, and cucumbers. When the pest multiplies, not only the plant becomes leafless, but its young crop is also damaged.

As a result, it rots quickly. Pest control crops are very sensitive to pests and diseases, and if the necessary measures are not taken against them, a large part of the harvest of the crops may be lost or the plant may not produce at all. Dozens of sucking and rodent pests feed on sorghum crops, the most dangerous of which is the sorghum beetle. The biological and ecological characteristics of this pest have not been studied in the Zarafshan oasis, and effective and ecologically harmless control measures have not been developed.

Therefore, we believe that it is an urgent issue to study the biological and ecological characteristics of the beetle beetle in the Zarafshan oasis and to develop ecologically harmless control measures. For this, it is important to study the influence of environmental factors on the duration of the pest development phases. Poliz beetle, local name "Kakana", is an insect belonging to the genus *Epilachna*, family Coccinillidae. 37 species have been identified in the Zarafshan oasis.

The polyz beetle damages the above-ground organs of melons, cucumbers, watermelons, pumpkins, and other polyz crops from the time they germinate until the harvest.

The beetles and larvae of the pest gnaw the leaves of the plant, leaving only the veins of the leaves, they make pits in the fruit and the fruit rots, the yield decreases sharply.

The polyz beetle causes great damage to the saplings of polyz crops, the beetles of the pest completely eat the young saplings. It is often observed that the plant is completely killed when it is infected with the polyz beetle and its larvae during the peak of the plant's vegetation. The polyz beetle causes more damage to polyz crops planted in the evening. At this time, a large number of beetles are collected in the fields. In some plants, up to 43 beetles and 200-300 polyz beetle larvae can be counted. At the end of the harvesting period, the pest mainly feeds on young melon fruits. Damaged melon fruits become unusable for storage and transportation, and most of them rot immediately. Infected plants usually produce small and unripe fruit. The quality of fruits decreases and their weight decreases. Heavily infected plants do not bear fruit at all.

COMBAT MEASURES. It is necessary to remove the remnants of plants in the fields planted with polys crops, to deeply plow the land and to water it.

Carrying out these activities is important in preventing the mass reproduction of the beetle next year.

Planting polys crops early and harvesting healthy seedlings. In early spring (March-April) it is effective to carry out preventive measures against sucking pests (aphid, thrips, spider mite, spider mite) that have started to develop in the weeds around the field. BI-(58-0.2%) benzaphosphate-(0.3%), karate-(0.05%), cyperphos-(0.1%). This event is of great importance in the prevention of damage to cultivated crops by aphids and other sucking pests during the feeding period of the silkworm, as well as in increasing the number of useful insects in the fields. If the amount of aphids increases in June, and the ratio of beneficial insects to active forms is more than 1:15-20, chemical control is necessary. For this, karbofos (0.1%), BI-58 (0.2%), benzophosphate (0.25%), mospilan (0.02%) or confidor (0.03%) are used. it is necessary to stop 30 days before the harvest.

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*Turginova M.M.
Andijon mashinasozlik instituti
"Iqtisodiyot" kafedrasi assistenti
O'zbekiston Respublikasi*

HUDUDIY BANDLIK TUSHUNCHASI MAZMUN-MOHIIYATI VA ILMIY NAZARIY ASOSLARI

Annotatsiya: maqolda hududiy bandlik tushunchasi mazmun-mohiyati va ilmiy nazariy asoslari haqida gap borgan.

Kalit so'zlar: hudud, badnlik, tushuncha, mazmun, mohiyat, ilmiy, nazariya, asos.

*Turginova M.M.
Assistant
"Economics" department
Andijan Machine-building Institute
Republic of Uzbekistan*

CONTENT AND SCIENTIFIC THEORETICAL BASIS OF THE CONCEPT OF REGIONAL EMPLOYMENT

Abstract. The article talks about the essence and scientific theoretical foundations of the concept of territorial employment.

Key words: area, body, concept, content, essence, scientific, theory, basis.

Mintaqaviy darajada bandlikning o'ziga xos xususiyatlarini o'rganish, birinchi navbatda, mehnat munosabatlari sohasida o'zini namoyon qiladigan hududiy naqshlarni aniqlashni o'z ichiga oladi. Mintaqaviy darajada bandlikning o'ziga xos xususiyatlarini ko'rib chiqayotganda, uning mintaqalar ichidagi iqtisodiy vaziyatga ta'sir qiladigan iqtisodiy jarayonlarga bog'liqligini ta'kidlash kerak.

Aholi bandligini muayyan darajada barqaror ushlab turish har qanday mamlakat oldida turgan murakkab vazifalardan sanaladi. Bandlik sohasida bozorning o'zini o'zi avtomatik suratda tartibga solish jarayoniga ta'siri har doim ham sezilmaydi. Shu sababli bozor iqtisodiyotiga yo'naltirilgan barcha mamlakatlarda doimiy, bandlik sohasiga ta'sir ko'rsatish shakllari va vositalari jihatidan egiluvchan choralarni qo'llash asosida bandlikni tartibga solish siyosati amalga oshirilmoqda. Aholining to'liq va samarali bandligini ta'minlash har qanday demokratik jamiyatning muhim vazifalaridan biridir.

Aholini ish bilan ta'minlash (bandlik) siyosati - jamiyat va uning har bir a'zosining ijtimoiy-iqtisodiy rivojlanishiga bevosita va bilvosita ta'sir etuvchi chora tadbirlar yig'indisidir. Bandlik sohasidagi davlat siyosati ikkita asosiy

vazifani hal qilishga qaratilgan: birinchidan, amaldagi investitsiyalanayotgan kapitalning ishchi kuchiga bo'lgan ehtiyojini qondirish. Jadal va foydali amal qiladigan kapital – ishchi kuchidan samarali foydalanishning eng muhim dalilidir;

ikkinchidan, mehnatga layoqatli aholini kishilarning me'yoridagi hayot kechirishlarining muhim sharti sifatida ish joylari bilan ta'minlash. Aholining farovonligi to'g'risida g'amxo'rlik qilish davlatning an'anaviy vazifasi hisoblanadi

Davlat mehnat bozorida ikki turdagi – passiv va aktiv siyosatni amalga oshirishi mumkin. Passiv siyosat ish izlayotgan fuqarolarni ro'yxatga olish, ishsizlik nafaqasini tayinlash, uni taqdim qilish tizimini tashkil etish, ishsizlar va ularning oilalarini qo'llab-quvvatlashning pulsiz shakllarini amalga oshirish bilan cheklanadi. Davlatning mehnat bozorida faol siyosati bozor iqtisodiyoti sharoitida mehnat qilayotgan aholi ehtiyojlariga ko'p darajada javob beradi. Uning maqsadi mehnat qilishni istagan har qanday inson o'z talablariga mos ish joyini topishidan iborat. To'liq bandlikni ta'minlashga qaratilgan aktiv siyosat olib borish rivojlangan mamlakatlar mehnat bozorida davlat siyosatining ustuvor yo'nalishi hisoblanadi. Bu siyosat asosiy tadbirlariga quyidagilar kiradi

- davlat tomonidan iqtisodiyotga investitsiyalarni rag'batlantirish, bu yangi ish joylarini yaratishning asosiy sharti hisoblanadi;

- tarkibiy o'zgarishlar bilan bog'liq ishsizlarni qayta o'qitish va malakasini oshirishni tashkil etish;

- mehnat bozorida vositachilik qilayotgan mehnat birjalari va bandlik xizmatlarini rivojlantirish, friksion ishsizlik va tarkibiy o'zgarishlar bilan bog'liq ishsizlikni pasaytirish maqsadida vakant ish joylari to'g'risida ma'lumotlar yig'ish, taxlil qilish va bartaraf qilish borasida choralar ishlab chiqish;

- kichik va oilaviy tadbirkorlikka ko'maklashish, bu ko'plab mamlakatlarda aholi bandligini ta'minlashning muhim uslubi sifatida o'rganilmoqda;

- ish beruvchilar tomonidan alohida aholi guruhlari – yoshlar, nogironlarga ish joylarini taqdim etishni davlat tomonidan rag'batlantirish (soliq va qonunchilik tadbirlari orqali);

- zarurat tug'ilganda ish topish uchun yashash joyini o'zgartirishda ko'maklashish;

- bandlik muammolarini hal qilishda xalqaro hamkorlik, xalqaro mehnat migratsiyasi bilan bog'liq masalalarni hal qilish;

- davlat sektorida – ta'lim, tibbiy xizmatlar, kommunal xo'jaligi, jamoatchilik binolari va inshootlarini qurish sohalarida ishchi o'rinlarini yaratish;

- jamoat ishlarini tashkil qilish. Mehnat bozorida faol siyosat olib borishda bandlar, band bo'lmagan va ishsiz fuqarolarning yosh-jinsiy tarkibi, kishilarning o'rtacha yoshi, mazkur tarmoq mehnat salohiyatini tashkil qiluvchilar, ularning malaka darajasi, yollanib ishlashdan oladigan oila daromadi, mustaqil bandligi, yakka mehnat faoliyati hamda mehnat muassasalarini (tadbirkorlar, ishlovchilar,

kasaba uyushmalari tashkilotlari) rivojlantirish va uning samaradorligini hisobga olish zarur.

Mehnat bozori bozor iqtisodiyoti tizimida markaziy o'rinni egallaydi. Bu, birinchi navbatda, bozor munosabatlari sharoitlarida amal etadigan turli: xom ashyo, materiallar, yoqilg'i, tayyor buyumlar, loyihalar, ilmiy ishlanmalar, xizmatlar, turar joy, investitsiyalar, qimmatli qog'ozlar va boshqa bozorlar bir-birlaridan farq qilsa ham ularni asosiy sub'ekt - inson birlashtirib turishi bilan izohlanadi. Mehnat bozori va ish bilan bandlik nazariyasining maqsadi mazkur sohalarda ro'y berayotgan voqea va jarayonlarni ilmiy holda ifoda etishdir. Bu nazariya amaliy ahamiyatga ega: u mazkur sohalarga oid bilimlarni integratsiyalashtirar va umumlashtirar ekan, ularni iqtisodiy, ijtimoiy, siyosiy va inson hayoti faoliyatining boshqa jabhalarida real tarzda namoyon bo'lishiga xizmat qiladi.

Mehnat bozori va ish bilan bandlik nazariyasi uning vazifalarida konkretlashadi. Bu mehnat bozori va ish bilan bandlik rivojlanishi qonuniyatlari va tendensiyalarining tahlili asosida mazkur sohalarning tub muammolarini aniqlash va ularni hal etish yo'llari va usullari yuzasidan ilmiy asoslangan tavsiyalar tayyorlash, mehnat bozori samaradorligini oshirishga xizmat qiladigan modellar ishlab chiqish, mehnat resurslari prognozlarini asosida mamlakat va mintaqani iqtisodiy-ijtimoiy rivojlantirish istiqbol rejalariga aniqliklar kiritish bo'yicha xulosalar tayyorlashdan iboratdir.

Mehnat bozori va ish bilan bandlik nazariyasida umumiy, alohida va xususiy qonuniyatlarni ham mavjud bo'lib, ular mehnat bozorida talab va taklifning ish haqi miqdoriga bog'liqligi, ishsizlik va iqtisodiyotdagi mehnat unumdorligining o'zaro bog'liqligi («Ouken qonuni»), ish bilan bandlik tarkibining xo'jalik yuritish shaklidagi bog'liq ravishda o'zgarishi, ilmiytexnikaviy va texnologik taraqqiyot natijasida tarkibiy ishsizlikning paydo bo'lishi kabi jarayonlarda o'z ifodasini topadi.

Mehnat bozorida faol siyosatni amalga oshirish mintaqalarda iqtisodiyot tarkibiy o'zgarishlar va uni tartibga solishning samarali usullarini shakllantirish bilan bog'liq. Mehnat bozorini tartibga solish deganda, tashqi mehnat bozoriga ta'sir ko'rsatadigan chora-tadbirlar ko'zda tutiladi. Bu tadbirlar iqtisodiy, ma'muriy, tashkiliy, qonuniy va mehnat bozoriga ta'sir ko'rsatishning boshqa tadbirlari majmui hisoblanadi. Mehnat bozorini davlat tomonidan tartibga solishning asosiy maqsadlari ishsizlarni mehnat faoliyati jarayoniga yanada jadalroq jalb etish, tarkibiy qayta qurishni rag'batlantirishni xohlovchilarga ishchi o'rinlarini taqdim etish va ishdan bo'shatilayotgan ishlovchilarni qayta taqsimlashdan iborat. Band bo'lmagan fuqarolarni ijtimoiy muhofazalash, egiluvchan mehnat bozorini huquqiy ta'minlash hamda ishga joylashtirish, kadrlarni tayyorlash va qayta tayyorlash yo'li bilan rivojlantirish bu faoliyatning asosiy yo'nalishlari hisoblanadi.

Mehnat bozorlarida boshqa bozorlardagidan farqli ravishda iste'molchi ehtiyojini qondiradigan tovar emas, balki muayyan mahsulot ishlab chiqarish

(xizmat turi ko'rsatish) uchun talab etiladigan ishchi kuchi xarid qilinadi. Ya'ni ishchi kuchiga talab tovar va xizmatlarga talabdan kelib chiqadi, bu esa mehnat bozori tovar bozorlari bilan uzviy bog'liqligini ko'rsatadi. Ayni paytda ishchi kuchiga talab kapital bozoridagi holat investitsiya muhitidan ham kelib chiqadi. Mehnat va kapital bir-birini to'ldira oluvchi va bir-birining o'rnini bosa oluvchi ishlab chiqaruvchi omillar hisoblanadi. Shuning uchun kapital qiymatidagi har qanday o'zgarish mehnat bozoriga ta'sir ko'rsatmay qolmaydi. Bu omillar mehnat, tovar va kapital bozorlari o'zaro aloqada amal qilishini ko'rsatadi.

Shu bilan birga mehnat bozori va ish bilan bandlik nazariyasiga hozirgi paytdagi konseptual yondashuvlarda aholining ish bilan bandligi sifati muammosiga e'tibor tobora kuchaymoqda. Iqtisodiy adabiyotda shaxsning ish bilan bandligi sifati hamda jamiyatdagi ish bilan bandlik sifati tadqiq etiladi. Lekin ayrim tadqiqotchilar ish bilan bandlik sifatiga ish bilan bandlik sharoitlari va inson salohiyatini rivojlantirish nuqtai nazaridan yondashsalar, boshqa izlanishlarda shaxs yoki ijtimoiy guruh turmush darajasi, shuningdek ish bilan bandlik xususiyatida namoyon bo'ladigan xususiyatlar tahlil etiladi.

Fikrimizcha, ish bilan bandlik sifatiga yondashuvlardagi bunday farqlarga qaramay, mazkur tushunchaning aniq ko'rsatkichlar tizimi mavjud, Bizningcha, ular quyidagilardan iborat:

- ish bilan band xodim daromadining darajasi. Bu daromad Xalqaro mehnat tashkiloti (XMT) hujjatlarida qayd etilganidek, faqat xodimning emas, shuningdek uning oila a'zolari ehtiyojlari eng kam miqdori hamda ish kuchini hosil etish (ta'lim olish, kasb egallash, salomatlikni saqlash va hokazolar) uchun yetarli bo'lishi lozim;

- oilada jon boshiga to'g'ri keladigan daromadning xarid qobiliyati;

- ijtimoiy mehnat unumdorligi darajasi. Mazkur ko'rsatkichning umume'tirof etilgan mezoni - iqtisodiy faol aholi birligiga to'g'ri keladigan yalpi ichki mahsulot hajmi mavjud;

- mehnatga haq to'lash xarajatlarining yalpi ichki mahsulot hajmidagi solishtirma ulushi. Bu ijtimoiy yo'naltirilgan bozor iqtisodiyotida ish bilan bandlik sohasidagi iqtisodiy siyosatning eng muhim indikatorlaridan biri hisoblanadi;

- mehnat bozorida ish kuchi sifati va raqobatdoshligi darajasi. Ishsiz qolgan shaxslarni davlat tomonidan qo'llab-quvvatlash, ularni ijtimoiy muhofazalash mehnat bozoriga davlat siyosatining passiv shakliga kiradi. Ishsiz fuqarolarni davlat kafolatlaydi:

- ishsizlik bo'yicha nafaqalar ko'rinishida ijtimoiy qo'llab-quvvatlash, moddiy yordam va boshqa ijtimoiy to'lovlarni ta'minlash;

- bepul tibbiy xizmat ko'rsatish.

Rivojlangan mamlakatlarda ishsizlarga moliyaviy yordam ishsizlik bo'yicha sug'urta tizimi asosida amalga oshiriladi. Aholining alohida guruhlari, ishlovchilar, tadbirkorlar hamda mehnatni tashkil etishning ma'lum unsurlari davlat ta'sir ko'rsatish ob'ekti hisoblanadi. Davlat ularga turli imtiyozlar, shu

jumladan, soliq imtiyozlari taqdim etadi, jamoat ishlarini tashkil qiladi, shu orqali mehnatga bo'lgan talabni rag'batlantiradi va bandlik muammolarini hal qiladi, korxonalar va ish joylarini (davlat tadbirkorligi) o'zi yaratadi va h.k. Ta'sir ko'rsatish ob'ekti xususiyatlaridan kelib chiqib, umumiy ta'sir ko'rsatish choralarini va maxsus tadbirlarni ajratish mumkin.

Ta'sir ko'rsatish yo'nalishi bo'yicha xodimlarga bo'lgan talabni ham, taklifni ham oshiradigan (kamaytiradigan), talab tarkibi va taklifning tarkibida aks etadigan, ularning o'zaro muvofiqligi darajasini oshirishga qaratilgan tadbirlar farqlanadi.

Ta'sir ko'rsatish shakliga ko'ra, bevosita va bilvosita tartibga solish usullari farqlanadi. Birinchi guruhga davlat subsidiyalashi va turli imtiyozlar, shu jumladan, soliqlardan imtiyozlar taqdim qilish yo'li bilan barcha mumkin bo'lgan tashkiliy-huquqiy shakllardagi, davlat bandlik xizmati bilan hamkorlik qiladigan va qandaydir kasb bo'yicha o'qigandan keyin ishga qabul qiladigan korxonalarda bandlikni rag'batlantirish kiradi. Ikkinchi guruhga demografik vaziyatni tartibga solish, davlat xaridlarini ko'paytirish, soliq to'siqlarini kamaytirish, amortizatsiyani jadallashtirish va boshqa tadbirlar, ya'ni mamlakat iqtisodiyoti pasayish bosqichida bo'lgan davrdagi ishbilarmonlik faolligini rag'batlantiradigan dastaklar kiradi.

O'zbekistonda hozirda qanday bandlik siyosati qo'llaniladi? Iqtisodiyotni modernizatsiyalash bosqichida O'zbekistonda aktiv bandlik siyosatga o'tish hayotiy zaruriyatdir. Aktiv bandlik siyosati - bu davlat tomonidan ishsizlik darajasini pasaytirish maqsadida olib boriladigan huquqiy, tashkiliy va iqtisodiy chora-tadbirlar yig'indisidir. Bu siyosat ish o'rinlarini saqlab qolish maqsadida ishchilarni kutilayotgan bo'shatishlardan ogohlantirish; ish izlayotganlarni o'qitish, qayta tayyorlash va malakasini oshirish; yangi ish o'rinlarini yaratishni moliyalashtirish; ish o'rinlarini izlash va tanlash; jamoat ishlarini tashkil etish tizimi orqali yangi ish o'rinlarini yaratish va boshqalarni qamrab oladi.

Bandlik sohasida faol davlat siyosatini olib borish aholini ish bilan ta'minlash dasturini ishlab chiqish va uni hayotga tatbiq etish orqali amalga oshiriladi. Bu dastur mehnat bozoridagi holat va uning rivojlanish istiqbollariiga mos ravishda shakllanadi.

Bandlikni hududiy tartibga solish hududlar rivojlanishining ko'plab o'ziga xos jihatlarni hisobga olishni va ular asosida aniq maqsadga yo'naltirilgan chora-tadbirlar ishlab chiqishni taqozo etadi. Ammo, ko'pchilik hududlarda yangi ish o'rinlarini yaratish borasida passiv siyosat olib borilayotir.

Kichik va o'rta biznes yangi ish o'rinlari yaratish mumkin bo'lgan soha bo'lishi bilan birga qo'shimcha daromad manbai hisoblanadi. Bu soha ishchilardan yuqori malaka talab qilmaydi va ish tartibi yetarli darajada egiluvchan bo'lganligi bois ayollarni ish bilan ta'minlash darajasini oshirish imkonini beradi. Shunga qaramasdan, davlatning bandlik sohasida olib borayotgan siyosati faqat shu soha bilan chegaralanishi mumkin emas. Iqtisodiyotning davlat va xususiy sektorida ilgari ko'rib chiqilgan bandlik turlari

bilan bir qatorda aholini ish bilan ta'minlash sohasida iqtisodiyotning norasmiy sektoridagi faoliyat yangi hodisa hisoblanadi. Xalqaro Mehnat Tashkiloti iqtisodiyotning norasmiy sektoriga katta kapitalga ega bo'lmagan, mehnat unumdorligi birmuncha past, yuqori daromad keltirmaydigan, tovarlar va xizmatlar ishlab chiqarish va sotish bilan shug'ullanuvchi kichik muassasalarni kiritadi. Bu muassasalarda yaratilayotgan ish o'rinlari barqaror emas. Odatda, bu muassasalar statistikada hisobga olinmaydi, hukumat tomonidan qo'llab-quvvatlanmaydi, ularga nisbatan mehnat qonunchiligi, ijtimoiy himoya tizimi va boshqalar joriy etilmaydi.

Iqtisodiyotda norasmiy sektorning paydo bo'lishi ayniqsa rivojlanayotgan mamlakatlar uchun xosdir. Xalqaro ekspertlarning baholashicha, shaharlarda band bo'lganlarning 30%dan 50%gachasi mazkur sektorda faoliyat olib borishadi. O'tish davri sharoitida aholining sezilarli qismi mana shu sektorda faoliyat olib boradi va ayrimlarining faoliyati noqonuniy faoliyat bo'lganligi sababli hukumat bu sektorni qonuniy tartibga solmog'i darkor.

Shunday qilib, mehnat bozorini tartibga solish siyosati iqtisodiy siyosatning ajralmas qismi bo'lib, u quyidagi maqsadlar uchun xizmat qiladi:

- iqtisodiyotda tarkibiy o'zgarishlarni rag'batlantirish va bo'shagan ishchi kuchini qayta taqsimlash jarayonini tezlashtirish;
- ishsizlarni iloji boricha tezroq ishga jalb etish;
- ish izlayotgan har bir ishchini ish bilan ta'minlash. Shuning uchun aholini ish bilan ta'minlash sohasida olib borilayotgan siyosatni quyidagi yo'nalishlar bo'yicha amalga oshirish maqsadga muvofiqdir:
 - inson resurslarini yanada faolroq rivojlantirish;
 - fuqarolarning yangi ish joylari va o'z-o'zini ish bilan ta'minlash borasidagi tadbirkorlik tashabbuslarini qo'llab-quvvatlash;
 - ijtimoiy himoyaga muhtoj va ish izlashda qiynalayotgan fuqarolarni ish bilan ta'minlashga ko'maklashuvchi maxsus tadbirlar o'tkazish;
 - yangi ish o'rinlari yaratayotgan va mavjudlarini saqlab qolayotgan (eng avvalo, ijtimoiy himoyaga muhtoj va ish izlashda qiynalayotgan fuqarolar uchun) ish beruvchilarni rag'batlantirish;
 - aholini ish bilan ta'minlash sohasida olib borilayotgan faoliyatni ijtimoiy iqtisodiy siyosatning boshqa yo'nalishlarida olib borilayotgan faoliyat bilan (shuningdek, bu faoliyatni mahalliy, hududiy va respublika miqyosida) muvofiqlashtirish;
 - ishchi kuchiga bo'lgan talab va taklifning ham tarkibiy, ham kasbiy jihatdan balanslashuviga doir chora-tadbirlarni ishlab chiqish va amalga oshirish;
 - qishloq joylarda ishchi kuchi harakatlanishi va malakasini oshirishni rag'batlantirish, shuningdek, uy-joy bozorining shakllanishini tezlashtirish;
 - yangi ish o'rinlarini yaratish sura'tlarini aholi o'sish sur'atlariga yaqinlashtirish;

● aholini ish bilan ta'minlash va ishchi kuchi migratsiyasi muammolarini yechishda xalqaro hamkorlikni (ko'proq MDH mamlakatlari bilan) rivojlantirish, mehnat migrantlarini har tomonlama himoyalashni yo'lga qo'yish.

Mintaqaviy iqtisodiy jarayonlarning xususiyatlarining mintqa aholisining ish bilan bandligining xulq-atvor omillariga ta'sirini ko'rib chiqaylik.

Birinchidan, mintaqaning tabiiy xususiyatlari, shuningdek, mintaqaning iqlim sharoiti aholining yashash sharoitlarini belgilaydi.

Ikkinchidan, aholining demografik xususiyatlari, mintaqaning milliy, madaniy, tarixiy xususiyatlari mintaqaviy mehnat bozorida ishchilarning iqtisodiy xatti-harakatlarining o'ziga xos xususiyatlarini, xulq-atvor stereotiplarini va mintaqaviy mehnat bozorining turli hodisalariga munosabatini belgilaydi.

Mintqa aholisini ish bilan ta'minlashning ko'rib chiqilayotgan omillarining ustunligi to'g'ridan-to'g'ri hududiy kontekstda davom etayotgan iqtisodiy jarayonlarning o'ziga xos xususiyatlariga bog'liq bo'lib, bu o'z navbatida ma'lum bir hudud aholisini ish bilan ta'minlashning mintaqaviy tendentsiyalari va naqshlarini belgilaydi.

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*Ubaydullaeva V.P.
Tashkent medical academy
Biomedical Engineering, Informatics and Biophysics
Khodjaeva D.Z.
"Information technologies in biophysics and medicine" department Tashkent
State Dental Institute
Khujaniyozova G.S.
Department of "Higher and Applied Mathematics"
Tashkent Financial Institute*

METHODOLOGY FOR DEVELOPING PRACTICAL COMPETENCE IN PHYSICAL EDUCATION FOR STUDENTS AT HIGHER MEDICAL EDUCATION INSTITUTIONS

Abstract. In this article, several important pedagogical technologies and methods used to shape students' practical competence in physical education are outlined. Additionally, the article assesses the effectiveness of developing students' practical competence based on these instructional methods.

Keywords: physics, practical competence, teaching process, student, independent work, technology, methodology, T-scheme, interactive.

INTRODUCTION

All the efforts carried out in medical institutions of higher education, including the educational process organized in physics, are aimed at training qualified personnel for this field, who can fully demonstrate their talents and abilities., aimed at raising mature individuals capable of finding their place in life. In the future, these approaches will serve to ensure the high development of our country, increase the well-being of our lives, and develop the medical field. For this, it is necessary to implement the tasks of using innovative pedagogical and information technologies in the organization of this process.

In the concept of the development of the higher education system of the Republic of Uzbekistan until 2030, quality renewal of the content of the continuous education system, improvement of the teaching methodology, focusing on the in-depth study of basic subjects, provided for in the state education standards Tasks such as developing criteria for evaluating pedagogical activity based on competencies are defined. This justifies the need to clarify the content of education aimed at improving the teaching methodology in the example of these subjects and the structure of the necessary base and subject-related competencies in the development of students' competence, and to improve the model and methods of developing students' competence based on general competency approaches related to the base and physical science [1].

In order to implement competency-based guidance in education, it's essential to have skills (competencies) that entirely differ from the methods used

to teach students their subjects. Most crucially, creating a unique approach tailored specifically to the student is vital.

At present, intensive efforts are underway globally to enhance physics education: defining the goals of teaching physics, determining the content of study materials, modernizing textbooks and other learning tools, and developing effective teaching styles and methods. Any pedagogical technology implemented by a physics teacher in the course of the learning process should primarily aim to foster the student's independent and creative activities. Teaching methods are considered a fundamental part of the learning process. Without appropriate methods, effective pedagogical activities cannot be realized.

Interactive methods (strategies, graphic organizers) enable students to systematically and effectively assimilate learning information. These interactive methods facilitate students in analyzing, synthesizing knowledge, organizing essential concepts, and articulating the overall essence of objects, processes, activities, and events while working with learning materials.

LITERATURE ANALYSIS AND METHODOLOGY

According to S. Isamitdinov and A. Mavlyanov, interactive methods are based on enhancing the activity, independent thinking, and autonomy of students in higher medical education institutions. When utilizing these methods, learning becomes an engaging activity, fostering independent learning strategies and skills. Students acquire scientific inquiry, research, and experimental skills, which contribute to their personal development. This enhancement in their learning significantly boosts effectiveness. Below, let's discuss some important methods for shaping the preparedness of students in higher medical education institutions[2, 3, 4].

These authors suggest that the following interactive methods can be effective for teachers to use in their teaching activities.

RESULTS

The brainstorming method: method of generating ideas. Students try to solve the problem together: they put forward their personal ideas for solving. The task is to create new ideas with the help of small groups. This method encourages problem-solving students to generate fantastic ideas. The more ideas, the better. At least one may be appropriate.

The T-scheme method: is a universal organizer for comparative concepts (yes/no or agree/disagree), facilitating the visual representation of contrasting ideas in a structured and concise manner. For instance, after reading a text discussing traditional and non-traditional forms of education, the first group sketches a T-schema, listing the advantages of traditional education on the left and presenting them during the given time. Then, they present opposing thoughts, highlighting the drawbacks of this approach. The second group does the same, analyzing the merits and drawbacks of non-traditional education in a similar schema. The groups' diagrams are compared, and a discussion is held based on the T-schema created in collaboration.

Reinforcement of the subject by the method of T-scheme
If you agree with the opinion presented in the table, go to the first column
“ + ”, otherwise put a “ - ” in the end column.

+	<i>Studying the physical basis of blood pressure measurement in the clinic opinions on the subject</i>	-
	There are several ways to measure arterial blood pressure. For example: 1. It is measured by inserting a needle directly into a vein and connecting the other end of the needle to a manometer with a rubber tube. 2. A thin catheter (a thin polyethylene tube) is inserted into a large blood vessel and the other end is connected to a manometer and the pressure is measured. 3. Bloodless blood pressure measurement method used in the clinic is the Korotkov method. Below are examples of electronic blood pressure measuring devices	
	N.S. Korotkov's method is based on listening to sounds made when blood flows from an artery compressed by a cuff.	
	When the artery is completely blocked, no sound is heard. Tones are heard when the air in the cuff is slowly deflated. These sounds are caused by the vibrations of the artery and the walls of the artery.	
	When the pressure is equal to the systolic pressure, the blood is able to rush through the constricted artery, creating laminar flow.	
	The first tone in the artery corresponds to the maximum value of pressure and is called systolic pressure.	
	When measuring the pressure, the phonendoscope is placed on the artery at a distance from the cuff (that is, far away from the heart) and the tones and noises associated with the turbulent flow and created together with it are heard. By gradually reducing the cuff pressure, laminar flow can be restored, as can be seen by the sudden decrease in audible tones. The cuff pressure corresponding to the restoration of laminar flow in the artery is recorded as diastolic pressure	
	The device for measuring arterial pressure consists of the following parts: - a cuff, a tourniquet, an air driver, a membrane manometer - a sphygmotonometer	
	During systole, the high-pressure wave caused by the ejection of blood from the left ventricle and spreading through the aorta and arteries is called a pulse wave.	
	The pulse wave propagates with a speed of 5-10 m/s and more. So, during systole (around 0.3 s, it should spread to a distance of 1.5-3 m), and this distance is more than the distance from the heart to the hands and feet. This means that the pulse wave front reaches the endpoints of the arms and legs after the pressure drop in the aorta.	
	According to general concepts and experiments conducted on cardiac function, it's understood that the pulse wave is not sinusoidal (harmonic).	
	The heart expends energy to increase the pressure of blood flow and impart kinetic energy to the blood.	

Modeling method: involves a device or situation designed to recreate real life. Students perceive the events and events described by the teacher and reinforce the topic through the model they draw in their notebooks. For example, an internal combustion engine. The steam pipe theme can be displayed. Before

moving on to this topic, the teacher gives and explains the model of the internal combustion engine to the group. The following questions are explained depending on the engine model: What kind of engine is called an internal combustion engine? It is called an internal combustion engine because the fuel burns directly inside the engine, in its cylinder.

What are the main parts of an internal combustion engine? The engine consists of a cylinder, inside which a piston moves, the piston is attached to the crankshaft by means of a connecting rod. For smooth rotation of the shaft, a weighted wheel is installed on the shaft. At the top of the cylinder are two valves that open and close automatically when the engine is running. The combustible mixture enters the cylinder through the first valve and is ignited by a spark plug. Combustion gases are released through the second valve. All this is shown through the model.

Work in small groups: the complexity of the work of a pedagogue is the ability to create conditions for the development of opportunities in the group. The most important thing is to create a need to understand their identity and life, and in order for them to succeed in their hard work on the path of learning, the pedagogue needs to believe in the capabilities of each of them. Success in this way depends on the pedagogue's determination and ability to provide timely help. They should be divided into 4 groups. Then you need to give them a name. For example, atom, molecule, force, work, etc. *It would be more appropriate if it was named with important words of the topic to be covered.*

One of the effective methods used in organizing the educational process is training. In this, the ability to achieve the desired goal, active participation, and find a positive solution to tasks is encouraged. During the training, he learns to use communication methods depending on the situation, acquires skills and competencies. These serve to form professional skills and qualifications in the process of methodological training of students.

In her research, Sh. Shodmonova emphasizes the resolution of problems related to real situations in formulating tasks for independent and creative work, highlighting the development of practical competencies in students through various methods, illustrating the significant relevance between the content of tasks and events, identifying solutions, and emphasizing the importance of reinforcing connections between events or processes in the minds of students.

The practical method is considered the most important in the formation of practical competences. This method involves the organization of exercises. During the exercise, the student repeats practical and mental actions several times. They are offered assignments, they work independently with handouts. Both collective and individual forms of exercise are used. In addition to mastering and strengthening knowledge, group exercise can also be used for supervision. Individual exercise serves to guide students to group activities while performing the same function.

DISCUSSION

Studying these issues from a scientific-pedagogical point of view is necessary to take into account the need of students for independent education and to create sufficient conditions for independent education; lack of preparation of primary education teachers for organization, implementation and control of independent education of students in taught subjects; lack of formation of knowledge, skills and qualifications for independent education among teachers; Issues such as the inadequacy of educational and methodical literature, recommendations, developments, instructions, and instructions related to the organization, implementation, and control of students' independent education are particularly relevant.

"Project" technology provides for the collection of information, research and implementation of the work of students individually or in groups for a specified period of time on a specified topic. This technology forms the skills of students to participate in the processes of planning, decision-making, implementation, verification and conclusion and evaluation of results. Project development can be individual or group. Group development of a solution to a problem situation. Provide a description of the problem situation. Divide into groups. Groups to determine the causes of the problem situation and think about the consequences. Choosing the right solutions is a coordinated result of joint activities. The project should serve learning, apply theoretical knowledge to practice, create the possibility of independent planning, organization and implementation by students.

Below are the stages and known methods of "Project" technology. Stages of the "Project" method: the stages of the method are as follows: the students of medical institutions of higher education develop assignments on the project work. Students independently collect information about the assignment based on textbooks, schemes, handouts; students develop a work plan independently. In the work plan, students should plan the stages of work, the time allocated to them and the technological sequence, material, equipment; small groups present their work plans. Students make a decision on completing the assignment based on the work plan. Students discuss the results of the decisions made together with the students of medical institutions of higher education. Different solutions are compared and the most optimal option is selected. Develops the "Evaluation form" of students of medical higher education institutions together with students; students perform the task independently based on the work plan. They can work individually or in small groups; verification, implementation, conclusion works are carried out.

In addition, small groups are involved in checking each other's work results. The results of the inspection are recorded in the "Evaluation Sheet".

Method of problem-based education. Activation of cognitive activity of students during the educational process and high level use of their intellectual capabilities depends on the following general factors: creation of a system of problematic questions on the subject being studied; teaching the topic materials

explained by the interview method based on the system of set problematic questions and revealing its essence; setting research tasks based on a problematic question.

The learning process created on the basis of solving problem situations is called problem-based education. In problem-based education, the teacher's activity consists in the fact that, in necessary cases, he explains the content of the most complex concepts, regularly creates problematic situations between students with the subject material being studied, informs students of facts, as a result, students independently draw conclusions based on the analysis of these facts. extract and summarize.

Problem situations are based on the improvement of students' independent works, which are based on the formation of scientific concepts, practical skills and qualifications, and deep logical analysis of other materials. It is necessary to know well the ways of creating problem situations before passing the problem training session. Attention is paid to the following: asking specific questions: encouraging generalization, proof, clear logical thinking; asking students questions that encourage thinking and offering them to find their solution independently; encouraging students to compare, generalize, draw conclusions, and compare given facts through theoretical and practical assignments; explain the need to look at the same question from different points of view and encourage to justify the given answers; to offer students to consider the phenomenon through different situations and inform about the contradictions encountered in the process of practical work.

Thus, the problem is not directly posed without any preparation. It is presented as the main issue in the training session. The complexity of the problems should naturally correspond to the level of the students. The materials presented should not be complicated. Only if students can solve the material, especially problems and assignments, their problem-solving potential will increase.

CONCLUSION

Any pedagogical technology introduced by the physics teacher into the educational process, regardless of whether its components are passed through the content of the lesson, the curriculum, the textbook or the activity of the teacher, the student's free and it is required to be aimed at the development of creative activity. Teaching methods are the main part of the training process. Pedagogical activities cannot be carried out without appropriate methods.

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*Umarxodjayeva D.M.
Toshkent davlat agrar universiteti
Tillar kafedrası*

DARSLARNI SAMARALI TASHKIL ETISH VA ZAMONAVIY XORIJ METODLARIDAN FOYDALANISH

Annotatsiya. Darslarni tashkil etish va zamonaviy xorijiy usullarni qo'llash o'quv jarayonini samarali tashkil etishning hal qiluvchi elementlari hisoblanadi. Samarali tashkil etilgan o'quv xona qurollari, o'qitishning innovatsion yondashuvlarini o'z ichiga olgan holda, talabalarning ta'lim natijalarini sezilarli darajada oshirishi, akademik yutuqlarni yaxshilashi va intellektual o'sish uchun qulay muhitni yaratishi mumkin. So'nggi yillarda talabalarning turli ehtiyojlarini qondirish uchun an'anaviy o'qitish usullarini yangilash va zamonaviy xorijiy yondashuvlarni o'z ichiga olish zarurati tobora ortib bormoqda. Ushbu maqolada darslarni samarali tashkil etish va ta'lim natijalarini oshirishda zamonaviy xorijiy usullardan foydalanish muhimligini o'rganadi.

Kalit so'zlar: o'qitish metodlari, zamonaviy usullar, xorij tajribasi, malakali o'qituvchilar, innovatsion yondashuvlar.

*Umarkhodjayeva D.M.
Department of Languages
Tashkent State Agrarian University*

EFFECTIVE ORGANIZATION OF LESSONS AND USE OF MODERN FOREIGN METHODS

Abstract. The organization of lessons and the use of modern foreign methods are decisive elements of the effective organization of the educational process. Effectively designed classroom equipment, including innovative teaching approaches, can significantly increase student learning outcomes, improve academic achievement, and create an environment conducive to intellectual growth. In recent years, there has been an increasing need to update traditional teaching methods and incorporate modern foreign approaches in order to meet the diverse needs of students. This article examines the importance of using modern foreign methods in effectively organizing lessons and improving educational outcomes.

Key words: teaching methods, modern methods, foreign experience, qualified teachers, innovative approaches.

Kirish: Darslarni samarali tashkil etishning asosiy afzalliklaridan biri shundaki, u o'qituvchilarga tuzilgan va yaxshi rejalashtirilgan o'quv muhitini yaratishga imkon beradi. Darslar yaxshi tashkil etilganda, o'qituvchilar har bir

mavzu uchun yetarli vaqt ajratishlari, barcha talabalar ishtirok etish uchun teng imkoniyatlarga ega bo'lishlarini ta'minlashlari va qo'shimcha yordamga muhtoj bo'lganlarga individual e'tibor berishlari mumkin. Bu, o'z navbatida, talabalar o'rtasida intizom va mas'uliyat hissini rivojlantirishga yordam beradi, chunki ular ulardan nima kutilayotganidan xabardor va o'z ishlarini shunga muvofiq rejalashtirishlari mumkin. Bundan tashqari, uyushgan o'quv xona sozlamalari chalg'itadigan narsalarni kamaytirishga, shovqin darajasini pasaytirishga va o'rganish uchun qulay muhit yaratishga yordam beradi.

Tuzilgan o'quv muhitini targ'ib qilishdan tashqari, darslarni samarali tashkil etish o'qituvchilarga ko'proq talabalarga yo'naltirilgan yondashuvni qo'llashga imkon beradi. Loyiha asosida o'qitish, o'quv xonalari va hamkorlikda o'qitish kabi zamonaviy xorijiy usullarni o'z ichiga olgan holda, o'qituvchilar talabalarni o'z bilimlariga egalik qilishga, tanqidiy fikrlash qobiliyatlarini rivojlantirishga va ijodkorlikni rivojlantirishga undashlari mumkin. Masalan, loyiha asosida o'qitish talabalarga jamoalarda ishlashni, tadqiqot o'tkazishni va yechimlarni ishlab chiqishni talab qiladigan haqiqiy muammolarni berishni o'z ichiga oladi. Ushbu yondashuv nafaqat muammolarni hal qilish ko'nikmalarini oshiradi, balki jamoaviy ish, muloqot va vaqtning boshqarish ko'nikmalarini rivojlantiradi.

Zamonaviy xorijiy usullarni qo'llashning yana bir muhim afzalligi shundaki, ular talabalarning turli ehtiyojlarini qondirishga yordam beradi. An'anaviy o'qitish yondashuvlari ko'pincha ma'ruzalar va darsliklarga tayanadi, ular barcha talabalar uchun qiziqarli yoki tegishli bo'lmasligi mumkin. Aksincha, gamifikatsiya, simulyatsiya va virtual haqiqat tajribalari kabi zamonaviy xorijiy usullar o'rganishni yanada interaktiv va samarali qilishi mumkin. Masalan, gamifikatsiya o'rganishni yanada qiziqarli qilish uchun ballar, nishonlar va yetakchilar taxtasi kabi o'yin dizayni elementlaridan foydalanishni o'z ichiga oladi. Ushbu yondashuv talabalarning motivatsiyasini, ishtirokini ushlab turish stavkalarini oshirishi ko'rsatilgan.

Bundan tashqari, zamonaviy xorijiy usullardan foydalanish nazariya va amaliyot o'rtasidagi tafovutni bartaraf etishga yordam beradi. Ko'pgina talabalar nazariy tushunchalarni Real stsenariylarga qo'llash uchun kurashadilar, bu esa tushunishning yetishmasligi va yomon akademik ko'rsatkichlarga olib kelishi mumkin. Amaliy tadqiqotlar, rol o'ynash mashqlari va sohaga oid loyihalarni o'quv dasturiga kiritish orqali o'qituvchilar talabalarga amaliy ko'nikmalarni rivojlantirishga va nazariy tushunchalarni real stsenariylarga tatbiq etishga yordam berishlari mumkin. Ushbu yondashuv nafaqat talabalarning tushunishini kuchaytiradi, balki ularga tegishli ko'nikma va tajribani taqdim etish orqali ularni ishchi kuchiga tayyorlaydi.

Darslarni samarali tashkil etish va zamonaviy xorijiy usullardan foydalanish muvaffaqiyatli ta'lim tizimining muhim tarkibiy qismidir. Tuzilgan va yaxshi rejalashtirilgan o'quv muhitini yaratish, talabalarga yo'naltirilgan yondashuvlarni qabul qilish, talabalarning turli ehtiyojlarini qondirish va nazariya va amaliyot o'rtasidagi farqni bartaraf etish orqali o'qituvchilar talabalarning

ta'lim natijalarini yaxshilashlari, ilmiy yutuqlarni yaxshilashlari va intellektual o'sish uchun qulay muhitni yaratishlari mumkin. O'qituvchilar XXI asr o'quvchilarini o'qitish muammolari bilan kurashishda davom etar ekan, ular yangi g'oyalarga ochiq bo'lishlari, o'qitish amaliyotini moslashtirishga tayyor bo'lishlari va talabalarni tobora murakkablashib borayotgan muvaffaqiyatga tayyorlaydigan yuqori sifatli ta'lim berishga sodiq bo'lishlari shart.

Shunday qilib, ular talabalarga tobora raqobatbardosh global iqtisodiyotda muvaffaqiyat qozonish uchun zarur bo'lgan ko'nikma, bilim va malakalarni rivojlantirishga yordam berishi mumkin.

Bundan tashqari, darslarni samarali tashkil etish va zamonaviy xorijiy usullardan foydalanish ham o'qituvchilarning malakasini oshirishga ijobiy ta'sir ko'rsatadi. O'qituvchilarni yangi yondashuvlar va metodologiyalarni qabul qilishga da'vat etilganda, ular o'z amaliyotlari haqida fikr yuritishga, bilim va ko'nikmalarini yangilashga va o'zgaruvchan talabalar ehtiyojlariga moslashishga majbur bo'ladilar. Bu nafaqat o'qituvchilarning ishonchi va malakasini oshiradi, balki maktablarda doimiy takomillashtirish madaniyatini ham rivojlantiradi.

Intensiv metodologiyaga muvofiq ish amaliyoti nutq faoliyatining barcha turlarini bir darsda ham, darslar tizimida ham ularning integratsiyasi va o'zaro bog'liqligiga asoslangan parallel rivojlanishining dolzarbligini ko'rsatadi. Shuningdek, o'quv maqsadlari va nutq faoliyati turlarining tegishli ierarxik bo'ysunishini hisobga olish muhimdir. Shu bilan birga, bu erda asosiy rol o'qishga beriladi. Nutq qobiliyatini rivojlantirish uchun samarali vosita bo'lib xizmat qiladigan o'qish funktsiyasi tufayli kommunikativ kompetentsiyaning shakllanishi va rivojlanishi katta darajada tezlashishi mumkin.

Gapirishdan oldin o'qitishni tushunish nutq ko'nikmalarini shakllantirishni tezlashtirish uchun haqiqiy imkoniyat yaratadi. Guruhlar tizimida tematik printsipga muvofiq o'quv materialini tanlash va oqilona tashkil etish – tuzilishi va mazmuni jihatidan yaxlit birlikni ifodalovchi o'zaro bog'liq guruhlar tizimi – o'quv jarayonini optimallashtirishga yordam beradi. Shu bilan birga, tematik jihatdan birlashtirilgan darslar tizimidagi har bir darsning o'ziga xos xususiyatlari va o'ziga xosligi borligini yodda tutish kerak: maqsad, mazmun, tuzilish va qurilish mantig'i kabilarni.

Muayyan mavzu bo'yicha o'quv mashg'ulotlarini rejalashtirish va uslubiy rivojlantirishda faol assimilyatsiya qilish uchun mo'ljallangan materialni (nutq faoliyatining barcha turlari uchun umumiy) va passiv ravishda o'zlashtiriladigan materialni oqilona taqsimlash ham muhimdir. Shuni hisobga olish kerakki, tayyorlangan nutq ko'nikmalarini rivojlantirish uchun ishlatiladigan "og'zaki" matn (matn-dialog) xarakter jihatidan o'qishni o'qitishda ishlatiladigan matnlardan, yozma nutqdan barcha xususiyatlari bilan (sintaksisning murakkabligi va boshqalar) tubdan farq qiladi. Taklif etilayotgan texnologiya kelishilgan birgalikdagi faoliyat va o'quv materialini yetkazib berish (tanishtirish), uni matn bilan takroriy uchrashuv orqali xotirada saqlash

(faollashtirish va o'qitish) va materialni muloqotda amaliy qo'llash orqali o'qitish tezligini oshirishga imkon beradi.

Tematik guruhlangan matnlar talabalarning ko'nikmalarini rivojlantirish uchun tuzilgan asos yaratadi. Ushbu matnlar taklif qilingan vaziyatlar kontekstida ularni hal qilish uchun o'quv jarayoniga kiritilmoqda.

Shuni ta'kidlash joizki, darslarni samarali tashkil etish va zamonaviy xorijiy usullardan foydalanish maktab ma'murlari va siyosatchilarining doimiy yordamini talab qiladi. O'qituvchilarni yetarli tayyorgarlik, resurslar va avtonomiyalar bilan ta'minlash ularning innovatsion yondashuvlarni samarali amalga oshirishlarini ta'minlash uchun juda muhimdir. Bundan tashqari, siyosatchilar ta'lim infratuzilmasiga, shu jumladan texnologiyaga asoslangan guruhlariga va raqamli resurslarga sarmoya kiritish muhimligini tan olishlari kerak.

Xulosa

Xulosa qilib aytganda, darslarni samarali tashkil etish va zamonaviy xorijiy usullardan foydalanish muvaffaqiyatli ta'lim tizimining muhim tarkibiy qismidir. Innovatsiyalarni qabul qilish, texnologiyadan foydalanish va talabalarga yo'naltirilgan yondashuvlarni birinchi o'ringa qo'yish orqali o'qituvchilar talabalarni tobora murakkablashib borayotgan dunyoda muvaffaqiyatga tayyorlaydigan qiziqarli o'quv tajribalarini yaratishi mumkin. Biz tez o'zgarish va texnologik taraqqiyot bu davrda oldinga harakat sifatida, biz o'qituvchi professional rivojlantirish oshirishga qaratilgan ta'lim islohoti sa'y-harakatlarini birinchi o'ringa kerak.

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*Umarova D.R.
acting associate professor
Department of "Corporate Management"
Tashkent State Transport University
Tuychiyev A.M.
senior teacher
Department of "Corporate Management"
Tashkent State Transport University*

TRENDS IN INNOVATIVE ECONOMIC DEVELOPMENT OF THE TRANSPORT SYSTEM OF UZBEKISTAN

Abstract. The article examines how the development of transport infrastructure affects the increase in the competitiveness of the economy of Uzbekistan. A detailed analysis of the current state of transport infrastructure in the country is being carried out. Possibilities for improving and improving performance indicators in this area are identified.

Key words: logistics, transport infrastructure, economic development, export potential, competitiveness.

Considering the fact that the countries of Central Asia are landlocked, in order to realize their production and trade potential, it is very important to develop land and air transport infrastructure and improve the technical support in this area. Improving the transport sector and the logistics system primarily leads to a reduction in production costs and reduces costs associated with the risks of transporting and storing products.

Secondly, this is an attractive indicator for both local producers and external investors. In addition, a developed transport infrastructure contributes to the development of tourism, provides safe and fast transportation of passengers and goods, and thereby contributes to social development.

Uzbekistan strives to achieve high rates of economic development. Quick access to production sources, safe and efficient delivery of products are key factors in realizing the country's export potential.

In international practice, in order to assess how efficiently the transport and logistics sectors function, a special unified logistics efficiency index has been introduced, which includes transport infrastructure, timeliness of transportation, efficiency of customs clearance, international transportation, the ability to track transportation and the quality of logistics services. The LPI (logistics performance index) is an interactive benchmarking tool designed to help countries identify challenges and benchmarking designed to help countries identify the challenges and opportunities they face in their trade logistics activities, and what they can do to improve their performance.

According to the Presidential Decree [2], “On measures to improve transport infrastructure and diversify foreign trade routes for the transportation of goods for 2018–2022,” the priority tasks are the construction of new railway lines, increasing the level of electrification of railway tracks, expanding the geography of flights, promoting the existing infrastructure and the range of services provided services to international air transport services markets. The Resolution notes that currently the existing transit potential of the republic is not fully utilized. The current inflexible transit and tariff policy hinders the attraction of additional transit cargo traffic. In this regard, it is recommended that commercial banks of the Republic of Uzbekistan provide loans for the purchase of vehicles, special equipment for transportation and storage of goods, from the date of issue of which no more than 3 years have passed, as well as other goods intended for the provision of transport and logistics services, with an interest rate not higher than the refinancing rate of the Central Bank of the Republic of Uzbekistan, with a grace period of up to 1 year.

Until January 1, 2022, national road transport enterprises engaged in international road transport and transport and logistics companies are exempt from paying:

- value added tax, property tax, as well as land tax, subject to the condition of directing the released funds to expand its own fleet of vehicles, modernize production facilities, create modern warehouse terminals and repay bank loans;
- customs payments (except for customs clearance fees) for imported warehouse equipment, loading and unloading equipment, units, spare parts and other goods not produced in the Republic of Uzbekistan, intended for the provision of transport and logistics services, according to lists approved in the prescribed manner.

The implementation of the above and a number of other reforms within the framework of the Resolution contributes to the further improvement of the transport infrastructure system and will thereby help develop the competitiveness of the national economy and realize the production and export potential of Uzbekistan.

Specifically, a system has been created that classifies transport subsectors into 4 categories with different problems and specific policy needs:

1. Strong industry with low sales prospects:

This is a negative situation that will develop towards the decline of the industry if strategic measures are not taken. The industry has a good competitive position in international markets, but new demand preferences will move away from the traditional products and services offered by the industry, forcing it to adapt to modern conditions. In this situation, public policy should support industrial transformation by focusing on the most competitive innovation areas and promoting cross-fertilization between different sectors. Demand management tools targeting the most competitive innovation areas will stimulate the transport sector's innovation efforts.

2. Strong industry with high sales prospects:

This ideal situation is associated with the high innovative potential of the private sector. The industry has the resources to innovate and the ability to meet future demand and preferences that align with its core business. In this case, government support should follow the priorities of the industry, providing a combination of innovative demand-side measures and innovative supply-side measures, but rather as a complement.

Government support should be aimed at filling innovation gaps caused by market failures.

3. Weak industry with low sales prospects:

This is the worst case scenario from an industry perspective. It reflects a declining industry that has failed to adapt to current demand patterns and will have to continue to contend with new changes in demand that will put additional pressure on traditional business models. Public policy should focus on supporting innovation, both on the demand and supply sides. This will support the industry's competitiveness at a time when it is driving deep industrial transformation through increased skills and specialization, focusing on the most promising innovative areas.

4. Weak industry with high sales prospects:

This is a case of low industry specialization in promising markets. Government support should be aimed at strengthening the innovative potential and competitiveness of those industries that are well positioned in those innovative areas with high sales prospects. Supply-side measures, such as innovation finance, will help companies facing the most critical challenges identified in each scenario.

Transport and infrastructure, like virtually all economic activities, are vulnerable to technological disruptions that transform services and processes. These technologies help create smarter, safer and more integrated systems.

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Umarova N.A.
senior teacher
Department of Economics and Finance
Angren University

SOME CONSIDERATIONS ABOUT USING GEOGEBRA IN INTEGRATED LESSONS BASED ON THE STEAM APPROACH

Abstract. This article delves into the integration of Geogebra, an interactive mathematics software, within the framework of STEAM (Science, Technology, Engineering, Arts, and Mathematics) education. It examines the benefits and challenges of incorporating Geogebra into integrated lessons, aiming to provide educators with valuable insights and considerations for effective implementation. Through a comprehensive analysis, this article offers practical recommendations for maximizing the potential of Geogebra as a powerful tool for STEAM learning.

Keywords: Geogebra, STEAM education, integrated lessons, mathematics software, interdisciplinary learning.

In the realm of contemporary education, the integration of Science, Technology, Engineering, Arts, and Mathematics (STEAM) has emerged as a pedagogical approach that fosters holistic learning and encourages creativity and innovation among students. At the heart of this interdisciplinary framework lies the endeavor to bridge the gaps between traditionally distinct subject areas, promoting a more cohesive and interconnected understanding of concepts. Within this context, the utilization of educational technology has become increasingly prevalent, offering educators versatile tools to enhance the learning experience. One such tool that has gained prominence in recent years is Geogebra, an interactive mathematics software that enables users to explore mathematical concepts through dynamic visualizations. While Geogebra has long been recognized for its efficacy in traditional mathematics instruction, its potential as a facilitator of integrated STEAM learning is perhaps less explored but no less significant. By harnessing the power of Geogebra, educators can create immersive and interactive learning experiences that transcend disciplinary boundaries, fostering a deeper understanding of complex concepts and nurturing the development of essential 21st-century skills. We delve into the integration of Geogebra within the framework of integrated STEAM lessons, exploring the benefits and challenges of incorporating this powerful tool into interdisciplinary instruction. Through a comprehensive analysis, we aim to provide educators with valuable insights and considerations for effectively leveraging Geogebra to enhance STEAM learning experiences. By understanding the potential of Geogebra and its implications for integrated education, educators can unlock new

avenues for engaging students and promoting meaningful learning across multiple disciplines.

Understanding Geogebra: Geogebra stands as a versatile software tool that seamlessly combines geometry, algebra, calculus, and other mathematical tools into a single platform. Its user-friendly interface allows students to create geometric constructions, manipulate mathematical objects, and visualize abstract concepts in real time. By offering multiple representations of mathematical ideas—graphical, algebraic, tabular, and geometric—Geogebra caters to diverse learning styles and preferences, enabling students to explore concepts from various perspectives. Its dynamic visualizations make abstract mathematical concepts tangible and accessible, facilitating deeper conceptual understanding.

The STEAM Approach: The STEAM educational paradigm integrates Science, Technology, Engineering, Arts, and Mathematics to foster interdisciplinary learning and creativity. This approach emphasizes the interconnectedness of these disciplines, encouraging students to make connections between different areas of knowledge. By engaging in STEAM activities, students develop problem-solving skills, critical thinking abilities, and innovative thinking—essential competencies for success in the 21st century. STEAM education promotes inquiry-based learning, collaborative problem-solving, and real-world application of knowledge, preparing students to tackle complex challenges in an increasingly interconnected world.

Enhancing Visualization and Conceptual Understanding: Geogebra's dynamic visualizations help students visualize abstract mathematical concepts, making them more tangible and easier to comprehend. Through interactive exploration, students can develop a deeper conceptual understanding of mathematical principles and their applications across STEAM disciplines.

Promoting Inquiry-Based Learning: Geogebra facilitates inquiry-based learning by allowing students to investigate mathematical phenomena and discover patterns through hands-on exploration. By engaging in open-ended tasks and guided inquiry, students develop problem-solving skills and mathematical reasoning while exploring STEAM concepts in authentic contexts.

Supporting Multimodal Learning: Geogebra supports multimodal learning experiences by providing multiple representations of mathematical concepts, catering to diverse learning styles and preferences. Students can engage with mathematical ideas through graphical representations, algebraic expressions, and dynamic animations, enhancing their comprehension and retention of STEAM concepts.

Access to technology and proficiency in using Geogebra may vary among students and educators, posing challenges to implementation in diverse educational settings. Educators must address technological barriers by providing adequate training and support to ensure all students can effectively utilize Geogebra in their learning.

Integration Across Disciplines: Integrating Geogebra into interdisciplinary STEAM lessons requires careful planning and coordination among educators from different subject areas. Collaborative curriculum design and interdisciplinary professional development can help facilitate seamless integration and alignment of Geogebra with STEAM learning objectives.

Provide Scaffolded Learning Opportunities: Scaffold students' learning experiences by providing guided activities and structured tasks that gradually increase in complexity. Incorporate formative assessment strategies to monitor student progress and provide targeted support as needed.

Foster Collaboration and Peer Learning: Encourage collaborative problem-solving and peer learning by promoting group activities and cooperative projects that require students to work together. Emphasize the value of communication, teamwork, and collective problem-solving skills in STEAM learning environments.

Geogebra allows for differentiated instruction by providing customizable learning experiences tailored to individual student needs and abilities. Educators can create activities and assignments that cater to diverse learning styles, levels of proficiency, and interests. For example, advanced students can explore more complex mathematical concepts or engage in extension activities, while struggling learners can receive additional support and scaffolding to build foundational skills. By adapting Geogebra resources to meet the unique needs of each student, educators can promote inclusive learning environments where all learners can thrive. Geogebra facilitates the exploration of real-world applications of mathematical concepts across STEAM disciplines. Through modeling and simulation features, students can apply mathematical principles to analyze real-world phenomena, solve authentic problems, and make informed decisions. For instance, students can use Geogebra to design and test engineering prototypes, analyze data in scientific investigations, create digital artworks inspired by mathematical concepts, or explore the principles of geometry in architectural design. By engaging in hands-on, project-based learning experiences with Geogebra, students develop a deeper appreciation for the relevance and applicability of mathematics in everyday life and professional contexts. Geogebra's interactive and visually engaging interface captivates students' attention and fosters intrinsic motivation to learn. By enabling students to actively explore mathematical concepts through dynamic manipulations and visualizations, Geogebra makes learning more enjoyable and meaningful. Students become active participants in their learning process, eagerly experimenting with mathematical ideas, making discoveries, and solving problems. Furthermore, the creative possibilities offered by Geogebra empower students to express their mathematical understanding in innovative ways, fostering a sense of ownership and pride in their learning achievements. As a result, student engagement and motivation are heightened, leading to deeper learning outcomes and long-term retention of knowledge.

In conclusion, the integration of Geogebra within the framework of integrated STEAM lessons holds tremendous promise for transforming the educational landscape and preparing students for success in a rapidly evolving world. Geogebra's dynamic visualization tools, interactive features, and multimodal representations empower educators to create immersive learning experiences that transcend disciplinary boundaries and promote deep conceptual understanding. By leveraging Geogebra effectively, educators can foster inquiry-based learning, collaborative problem-solving, and real-world application of knowledge across STEAM disciplines. Despite the challenges of technological barriers and integration across disciplines, thoughtful planning, collaborative curriculum design, and ongoing professional development can help educators harness the full potential of Geogebra in STEAM education. By providing scaffolded learning opportunities, fostering collaboration and peer learning, and promoting differentiated instruction, educators can create inclusive learning environments where all students can thrive. Ultimately, Geogebra enables educators to ignite students' curiosity, creativity, and passion for learning, equipping them with the skills and competencies needed to navigate the complexities of the 21st century and make meaningful contributions to society. As we continue to embrace the transformative power of technology in education, Geogebra stands as a beacon of innovation, inspiring educators and students alike to explore new horizons and unlock their full potential.

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USING IDIOMS IN THE CLASSROOM

Abstract. This article explores the pedagogical value of integrating idioms into language instruction, highlighting their role in enhancing language proficiency, cultivating critical thinking skills, and promoting cultural literacy and empathy. Idioms, those colorful expressions rooted in cultural and historical contexts, offer a gateway to language enrichment and deeper understanding. Through interactive activities and exploration of idiomatic language in context, students develop nuanced language skills and a broader appreciation for cultural diversity. Practical strategies for integrating idioms into the classroom are discussed, emphasizing the importance of scaffolding and support to ensure effective communication.

Keywords: Idioms, language proficiency, critical thinking skills, cultural literacy, language instruction.

In the ever-evolving landscape of education, educators are constantly seeking innovative approaches to engage students and foster deeper understanding. While textbooks serve as foundational resources, the richness of language extends far beyond their confines. Idioms, those colorful expressions rooted in cultural and historical contexts, offer a gateway to language enrichment and cultural literacy. Integrating idioms into the classroom not only enhances language proficiency but also cultivates critical thinking skills and fosters a deeper appreciation for the intricacies of communication. As the saying goes, "A picture is worth a thousand words." Similarly, idioms, often vivid and metaphorical in nature, encapsulate layers of meaning within a few words or phrases. These linguistic gems provide a window into cultural norms, historical events, and societal values, offering students insights into the nuances of language and the contexts in which it operates. From "raining cats and dogs" to "spill the beans," idioms infuse language with color, allowing students to explore the depths of expression beyond literal interpretation.

One of the primary benefits of incorporating idioms into the classroom is the enhancement of language proficiency. Idioms challenge students to decipher figurative language and understand the underlying messages conveyed. By exploring idiomatic expressions in context, students not only expand their vocabulary but also develop a deeper understanding of syntax and semantics. Moreover, exposure to idioms fosters language acquisition by immersing students in authentic linguistic experiences, mirroring real-world communication scenarios. Beyond linguistic proficiency, idioms serve as catalysts for critical thinking and problem-solving skills. Deciphering the meaning of idiomatic

expressions requires students to engage in deductive reasoning, drawing upon their linguistic knowledge and contextual clues.

Incorporating idioms into classroom activities can take various forms, from interactive games to creative writing exercises. For instance, teachers can organize idiomatic scavenger hunts, where students search for idioms in literature or everyday conversations and analyze their meanings. Alternatively, students can create their own idiomatic expressions based on personal experiences or cultural references, promoting creativity and self-expression. By integrating idioms into diverse instructional strategies, educators can cater to different learning styles and promote active engagement in language learning. However, while idioms offer myriad benefits, their usage requires careful consideration to ensure effective communication. As idiomatic expressions are often context-dependent, students must learn to discern appropriate usage and avoid misinterpretation. Moreover, educators must provide scaffolding and support to help students navigate the complexities of idiomatic language, fostering a supportive learning environment where students feel empowered to experiment and take risks.

Idioms, those fascinating linguistic quirks, offer a treasure trove of pedagogical opportunities within the classroom. At their core, idiomatic expressions are more than mere phrases; they encapsulate cultural nuances, historical anecdotes, and societal norms. By incorporating idioms into language instruction, educators can foster a holistic approach to language learning that goes beyond rote memorization and grammar drills. One of the primary benefits of integrating idioms into the classroom is the enhancement of language proficiency. Idioms challenge students to move beyond literal interpretations and decipher the underlying meanings embedded within figurative language. This process not only expands students' vocabulary but also deepens their understanding of syntax and semantics.

Consider the idiomatic expression "hit the nail on the head." While its literal meaning might elude students, unpacking its figurative interpretation—accurately identifying or addressing a problem—offers valuable insight into the complexities of language. By exploring idioms in context, students develop a nuanced understanding of how words and phrases function within the broader framework of communication. Moreover, exposure to idiomatic language mirrors authentic linguistic experiences, immersing students in the richness of everyday communication. Whether encountered in literature, conversations, or media, idiomatic expressions provide students with real-world examples of language in action, fostering language acquisition in meaningful contexts.

Beyond language proficiency, idioms serve as catalysts for critical thinking and problem-solving skills. Deciphering the meaning of idiomatic expressions requires students to engage in deductive reasoning, drawing upon contextual clues and prior knowledge to unlock meaning. This cognitive process encourages analytical thinking and fosters cognitive flexibility as students navigate the complexities of language ambiguity. For instance, consider the idiomatic

expression "barking up the wrong tree." Through exploration and analysis, students discern its figurative meaning—misdirecting efforts or pursuing a mistaken course of action. By dissecting idiomatic language in this manner, students hone their ability to infer meaning, evaluate context, and make informed interpretations—a skill set essential for success in both academic and real-world settings. Moreover, discussing the origins and cultural significance of idioms prompts students to delve into historical and cultural contexts, fostering a multidisciplinary approach to learning. By exploring the stories behind idiomatic expressions, students gain insights into the socio-cultural fabric of language, enriching their understanding of human experiences across time and space.

In addition to linguistic enrichment, the integration of idioms into classroom instruction promotes cultural literacy and empathy. Idioms often reflect cultural values, traditions, and beliefs, offering glimpses into the diverse perspectives that shape human experiences. By exploring idiomatic expressions from different cultures and linguistic backgrounds, students develop a deeper appreciation for cultural diversity and cultivate empathy towards others. For example, the idiomatic expression "breaking the ice" carries different connotations in various cultural contexts. While it may signify initiating conversation or overcoming social barriers in Western cultures, its interpretation may differ in cultures where ice is not a prevalent metaphor. By exploring such nuances, students gain a broader understanding of cultural differences and learn to navigate intercultural communication with sensitivity and respect.

In conclusion, the integration of idioms into classroom instruction offers a multifaceted approach to language enrichment and cultural understanding. By exploring idiomatic expressions, students not only enhance their language proficiency but also develop critical thinking skills, cultural empathy, and intercultural competence. As educators, embracing the richness of idiomatic language opens doors to transformative learning experiences, empowering students to navigate the complexities of language and engage with the world with greater depth and understanding. By harnessing the power of idioms, educators can cultivate a generation of language learners who are not only proficient in their linguistic abilities but also equipped with the cultural competence to thrive in an increasingly interconnected global society.

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*Umurzakova R.Z.
docent
"Hospital Therapy and Endocrinology" Department
Andijan State Medical Institute*

FREQUENCY OF OCCURRENCE OF THROMBOCYTOPENIC PURPURA AND METHODS OF THEIR TREATMENT

Abstract. Clinical cases of treatment of thrombotic thrombocytopenic purpura using multiple exchange plasmapheresis are presented. The difficulties of rapid diagnosis and the importance of early initiation of pathogenetically determined therapy are described. The tactics of using extracorporeal hemocorrection in the treatment of this disease are discussed.

Keywords: Treatment, moschkowitz disease, method, thrombotic thrombocytopenic purpura, plasmapheresis.

INTRODUCTION

This disease was first described by E. Moschcowitz in 1924 [1] and subsequently named after him. Moschkowitz disease or thrombotic thrombocytopenic purpura (TTP) (microangiopathic hemolytic anemia, thrombotic microangiopathy) is one of the types of thrombotic microangiopathy, which is based on systemic damage to small vessels by antigen-antibody complexes, causing endothelial proliferation, fibrinoid necrosis, formation of fibrin and hyaline thrombi [2].

MATERIALS AND METHODS

TTP is a rare disease. M. Noris et al. [4] note an incidence rate of 2–4 cases per 1 million population per year, and predominantly women suffer (the ratio of incidence of women to men is 3:2–5:2). People aged 30–50 years are most often susceptible to the disease.

The Oklahoma State Registry (USA, 2013) contains data on 4.46 cases of idiopathic TTP per 1 million residents per year [4]. Over time, there is no trend towards an increase in incidence. According to studies conducted in the USA in 1966–1991. [8, 9], the incidence was 3.7 cases per year per 1 million inhabitants. All researchers agree that TTP develops as an acute disease with a poor prognosis. The aggressive nature of the course of TTP requires the initiation of pathogenetically based therapy already in the first hours of the disease; in the absence of treatment, mortality approaches 90% [3].

The basis for the treatment of acquired TTP is the treatment regimen developed by J. George, taking into account the recommendations of the British Committee for Standards in Haematology, British Society for Haematology [4]. According to this scheme, basic therapy for TTP should be started as soon as possible, mainly on the 1st day of the disease. Therapy involving plasma exchange in a volume of 40–60 ml/kg body weight per day is pathogenetically justified [2].

If it is impossible to immediately begin plasma exchanges, it is recommended to carry out infusions of significant doses of fresh frozen plasma – FFP (25–30 ml/kg body weight per day) [4]. The advantage of plasma exchange, including in terms of improving the prognosis and reducing mortality in this group of patients, has been shown in a number of randomized studies, and is explained by the fact that plasma exchange allows the removal of a metalloprotease inhibitor, and FFP infusion only introduces this enzyme into the body from the outside.

The purpose of the work is to use the example of two cases from practice to describe the features of the clinical picture, variants of the *course, diagnosis and treatment of such a severe and rare disease as TTP*.

RESULTS AND DISCUSSION

Clinical observation No. 1

Bol'ny G., 37 years old. From the anamnesis: the first signs of the disease appeared 2 weeks later. after an acute respiratory viral infection and included weakness, pale skin, changes in behavior (unmotivated aggressiveness, mental disorders), dizziness, and fever. He sought medical help at his place of residence, and examination revealed severe anemia (hemoglobin 65–70 g/l), thrombocytopenia ($12\text{--}16 \times 10^9/l$), moderate hyperbilirubinemia (total bilirubin 40 $\mu\text{mol/l}$, mainly due to - direct fraction). A day after hospitalization, progression of neurological symptoms was noted - depression of consciousness up to stupor, right-sided hemiparesis; The appearance and increase of respiratory failure, which required the start of artificial pulmonary ventilation (ALV), and severe bronchorrhea with the release of a large amount of serous-hemorrhagic sputum, were also noted.

Clinical observation No. 2

Sick M., 39 years old. From the anamnesis: he noticed the first signs of the disease 1.5 months before hospitalization (weakness, headache, fever up to 38 °C). He was treated independently, after a short (about 2 weeks) improvement he noted the appearance of yellowness of the skin, pain in the lumbar region, and transient swelling of the legs. He sought medical help at his place of residence and was hospitalized in the infectious diseases department. The examination excluded acute viral hepatitis, leptospirosis, and HIV infection. 2 weeks after hospitalization, a sharp deterioration in condition was noted - impaired consciousness (stupor), progressive anemia (decrease in hemoglobin concentration to 65 g/l, red blood cells to $1.79 \times 10^{12}/l$), thrombocytopenia (up to $25 \times 10^9/l$), a moderate increase in the concentration of total bilirubin (up to 50 $\mu\text{mol/l}$) mainly due to the indirect fraction, LDH.

The described clinical cases have both a number of common features and significant differences. In both situations, TTP developed in men, which, according to the literature [2], is not typical for this disease and, accordingly, was a factor complicating diagnosis. The provoking factor in both situations was probably ARVI, which corresponds to the data published in the literature [3]. The clinical picture was not quite specific at the onset of the disease in both patients,

but gradually progressed over 1–1.5 months, which was reflected in the appearance of most of the known classical symptoms of TTP (microangiopathic hemolytic anemia, severe thrombocytopenia, neurological disorders, hemorrhagic syndrome, fever).

CONCLUSION

Thus, despite the fact that TTP is a severe and, in the absence of specific treatment, a highly lethal disease, with correct diagnosis and timely initiation of therapy, it is quite possible to achieve not only a clinical cure, but also long-term remission.

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*Ung'arov J.Yo.
assistant
Jizzax Politexnika institute
O'zbekiston, Jizzax*

KORXONADA MAHSULOT SIFAT KO'RSATKICHLARINI INTELLEKTUAL BOSHQARISH

Annotatsiya. Ushbu maqolada mamlakatimizda iqtisodiyotni rivojlantirish, korxonalar faoliyatida boshqaruv tizimini takomillashtirish, korxonada mahsulot sifat ko'rsatkichlarini boshqarish jarayonlari haqida muallif tomonidan ilmiy-nazariy va amaliy jihatlar ochib berilgan.

Kalit so'zlar: korxonada, iqtisodiyot, mahsulot sifati, sifatni boshqarish.

*Ungarov J.Yo.
assistant
Jizzakh Polytechnic Institute
Uzbekistan, Jizzakh*

INTELLECTUAL MANAGEMENT OF PRODUCT QUALITY INDICATORS IN THE ENTERPRISE

Abstract. In this article, the author reveals the scientific-theoretical and practical aspects of economic development in our country, improvement of the management system of enterprises, management of product quality indicators in the enterprise.

Key words: enterprise, economy, product quality, quality management.

Kirish. Zamonaviy bozor iqtisodiyoti sharoitida mahsulotning nafliligi, uning xaridor iste'molini qondira olishi muhim ahamiyat kasb etadi. Shu bois bugungi kundagi bozor iqtisodiyoti ishlab chiqariladigan mahsulot va ko'rsatiladigan xizmat uchun qat'iy sifat talablarini qo'yadi. Shuningdek, mahsulot sifati uning raqobatbardoshlik darajasi yuqori bo'lishi uchun ham xizmat qiluvchi asosiy ko'rsatkich hisoblanadi. [1,2].

Korxonalarda sifat boshqaruvi uslublarini takomillashtirishning dolzarbligi so'nggi yillarda zamonaviy progressiv tashkilotlarga sifat vositalari va uslublarini joriy etish orqali mahsulot va xizmatlar sifatini oshirishga yo'naltirilganligi bilan izohlanadi. Sifat boshqaruvi tashkilotning iqtisodiy rivojlanishi uchun vosita bo'lib, sifat menejmenti uslublarini takomillashtirish korxonada samaradorligini oshirishga bevosita ta'sir qiladi va ishlab chiqarish xarajatlarini optimallashtirishga olib keladi. Sifatni boshqarish uslublarini takomillashtirish tashkilotni baholashning eng muhim mezonlaridan biri hisoblanadi. Sifat boshqaruvi kompaniya faoliyatining asosiy yo'nalishlaridan biri bo'lib, chunki u

nafaqat mijozlar talablariga javob beradigan yuqori sifatli mahsulot yoki xizmatlarni ishlab chiqarish, balki bozorning yangi talablariga tez javob berish imkonini beradi [3,4].

Sifat ko'rsatkichlarining pasayishi tarkibiy qismlarning jismoniy eskirishi, ishlab chiqarilgan mahsulotning ichki tuzilishi yoki xususiyatlarining o'zgarishi, uning jismoniy eskirishi tufayli yuzaga kelishi mumkin. Sifat ko'rsatkichlari ishlab chiqarish jarayonida bir qator sabablarga ko'ra ma'lum jihatlari bilan farq qilishi mumkin. Ular bevosita mahsulotni ishlab chiqarish texnologiyasiga, yetkazib beriladigan komponentlarning sifatiga, mashinalar va ishlab chiqarish uskunalarning texnologik holatiga, o'lchash asboblariga, xodimlarni rag'batlantirish vositalariga, ichki va tashqi tashkiliy muhitning boshqa ko'plab omillariga bog'liq.

Ishlab chiqarilgan mahsulot sifati mahsulot ishlab chiqarishning barcha bosqichlarida yuzaga keladigan ko'plab tasodifiy omillarga ham bog'liq. Sifat menejmenti tizimini joriy qilish tashkilotdagi barcha bo'limlarning muvofiqlashtirilgan faoliyati orqali ushbu omillarning paydo bo'lishining oldini olish uchun zarurdir. Bu holda sifat menejmenti tizimi ishlab chiqarish jarayoniga doimiy ta'sir ko'rsatadigan tuzatish choralarini va ishlab chiqarilgan mahsulotni oxirgi foydalanuvchini qoniqtiradigan sifat darajasi bilan sotishni ta'minlaydi [5].

Sifatni boshqarishda tizim, muhit, maqsad, dastur kabi tushunchalar doimiy ravishda qo'llaniladi. Nazorat tizimi va boshqaruv tizimi ham mavjud. Korxonani boshqarishning ko'p darajalari boshqariladigan tizim kabi ko'rinadi. Sifat menejmenti tizimi boshqaruv tizimi tomonidan yaratiladi va qo'llabquvvatlanadi.

Sifat bilan bog'liq muammolarni hal qilish uchun mahsulotning hayot aylanishining barcha bosqichlarida sifatni to'g'ri baholash kerak. Sifatni baholash mahsulotni ishlab chiqarish va foydalanishning har qanday bosqichida sifat menejmentini shakllantirishga asoslangan.

Mahsulotning sifat darajasi, u baholanayotgan mahsulotning sifat ko'rsatkichlarini tegishli asosiy ko'rsatkichlar bilan taqqoslashga asoslanadi. Asosiy qiymat, ma'lum vaqt davomida erishishi mumkin bo'lgan maqbul daraja sifatida namoyon bo'ladi. Asosiy qiymatlarning namunasi ishonchli sifat ma'lumotlari bilan ma'lum vaqt ichida erishilgan ko'rsatkichlarning eng yaxshi mahalliy va xorijiy namunalari bo'lishi mumkin [6].

Mahsulot sifati darajasini baholash baholanayotgan mahsulot sifat ko'rsatkichlarini tanlash, ushbu ko'rsatkichlarning qiymatlarini aniqlash va ularni asosiy sifatida tanlangan ko'rsatkichlar bilan taqqoslash bo'yicha harakatlardir. Mahsulot sifati ko'rsatkichlarini tanlash uni qo'llashning maqsadi va shartlarini, iste'molchilarning talablarini hisobga olgan holda, shuningdek mahsulotni qo'llash sohasidagi amaldagi sifat talablarini hisobga olgan holda amalga oshiriladi. Sifat darajasini baholashni bosqichlarga bo'lish mumkin [7].

Mahsulot ishlab chiqarishning tartibga solinadigan va tartibga solinmagan davlat qonunchiligida ham sifat menejmentining yagona tizimini ishlab chiqish, shuningdek, ishlab chiqaruvchi bajarishi kerak bo'lgan turli xil standartlar,

ko'rsatmalar, qoidalar va boshqa hujjatlarning umumiy sonini kamaytirishga yordam beradi. ularning soni va nomuvofiqligi tufayli u ko'pincha qila olmaydi bajarish.

Sifatni boshqarish sohasidagi korxonalar oldida turgan barcha muammolarni hal qilishni ta'minlash uchun maxsus tayyorlangan mutaxassislar kerak. Bular sifat menejmentlari. Ularning funksiyalari, birinchi navbatda, sifat tizimi darajasida sifatni tashkil etish va boshqarish, shuningdek operatsion darajada boshqaruvni tashkil qilishni o'z ichiga oladi.

Xalqaro bozorda o'z mahsulotlari bilan zamonaviy kompaniya rejalashtirilgan mahsulot sifatiga erishish uchun yuqorida aytib o'tilgan barcha sifat menejmenti tizimlaridan foydalanadi. Natijada sifat menejmenti tizimini joriy etishning zamonaviy usullari korxonaning raqobatbardosh ustunligini oshiradigan tizimli ishlarga imkon beradi. Mijozlar, ayniqsa yirik mijozlar, ko'pincha shartnoma tuzishdan oldin mahsulot sifatiga ishonch hosil qilishni afzal ko'rishadi. Taqdimot, rasm va ko'rgazma namunalari ishonch bera olmaydi. Shuning uchun xalqaro standartlar tizimi joriy etish va unga rioya qilish mijozlarga ma'lum sifat darajasini kafolatlaydi [8,9].

Uning yordami bilan:

- mijozlarning ishonchini oshirish orqali doimiy mijozlarni ishonchli ushlab turish orqali mijozlar bilan yanada samarali ishlash mumkin;
- xodimlar natijalar uchun javobgarlikni his qilganda korxonaning ishlab chiqarish madaniyatini yaratishga ta'sir qilish;
- kompaniyaning investorlar uchun jozibadorligi oshadi;
- kompaniyaning ijobiy obro'si shakllanadi; korxonalar moliyaviy jihatdan barqarorlashadi.

Sifat masalasi har bir ishda, u qanday ish bo'lishidan qat'iy nazar, uning asosiy baholash kriteriyasi (ko'satkichi) bo'lishi kerak. Agarda har bir inson o'z ishiga yuqori ma'suliyat bilan qarab asosiy baholash kriteriyasiga munosib ravishda ish ko'rsa hayotimiz kundan – kunga yaxshilanib borishi turgan gap, bu esa butun mamlakat bo'ylab sifat masalasini yuqori darajaga ko'taradi [10].

Xulosa: Bugungi kunda mamlakat iqtisodiyotini rivojlantirish uchun xususiy tadbirkorlik, kichik va o'rta biznesni rivojlantirish, mamlakatimizning eksport salohiyatini oshirish va mahalliy mahsulotlarni ilgari surish vazifasi turibdi. Xalqaro standartlarga muvofiq sifat boshqaruvi tizimlarini joriy etish ushbu chora-tadbirlarni samarali amalga oshirish uchun dolzarb vazifaga aylandi.

Korxonalarda sifat menejmenti uslublarini takomillashtirishning dolzarbligi so'nggi yillarda zamonaviy ilg'or korxonalar tashkilotlarda sifat vositalari va usullarini joriy etish orqali mahsulot va xizmatlar sifatini oshirishga qaratilganligi bilan izohlanadi. Sifat menejmenti uslublarini takomillashtirish tashkilotni baholashning eng muhim mezonlaridan biri uning raqobatbardoshligini oshiradi.

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*Ung'arov J.Yo.
assistant
Jizzax Politexnika institute
O'zbekiston, Jizzax*

QURILISH, SANOAT KORXONALARIDA SIFAT MENEJMENTI TIZIMINI JORIY QILISH - DAVR TALABI

Annotatsiya: mazkur maqolada qurilish korxonalarining sifat menejmentini jahon tajribasi asnosida tizimga joriy qilish va O'zbekiston iqtisodiyotini modernizatsiya qilish va jamiyatni isloh qilish jarayonida qurilish sohasini rivojlantirishga qaratilayotgan chora-tadbirlar to'g'risida so'z ketadi.

Kalit so'zlar: menejment, modernizatsiya, investitsiya, eksport va import, ISO tizimi, sifat.

*Ungarov J.Yo.
assistant
Jizzakh Polytechnic Institute
Uzbekistan, Jizzakh*

IMPLEMENTATION OF THE QUALITY MANAGEMENT SYSTEM IN CONSTRUCTION AND INDUSTRIAL ENTERPRISES - THE REQUIREMENT OF THE TIME

Abstract. This article talks about the implementation of the quality management of construction enterprises in the system based on the world experience and the measures aimed at the development of the construction industry in the process of modernization of the economy of Uzbekistan and the reform of the society.

Keywords: management, modernization, investment, export and import, ISO system, quality.

Kirish. O'zbekistonda iqtisodiyotni modernizatsiya qilish va jamiyatni isloh qilish jarayonida qurilish sohasini rivojlantirishga qaratilayotgan choratadbirlar alohida o'rin egallaydi. Bu borada hukumat va davlat rahbarining farmon hamda qarorlari, qabul qilingan davlat dasturlari, ular ijrosini ta'minlash, tarmoqda islohotlar samaradorligini oshirish bo'yicha olib borilayotgan tadbirlar natijasida bunyodkorlik ko'lamlari tobora kengayib bormoqda.

Bugungi kunda mamlakatimizda 10 mingga yaqin qurilish materiallari ishlab chiqaruvchi korxonalar faoliyat yuritadi. Bundan ikki yil muqaddam bu borada 120 turdagi mahsulot tayyorlangan bo'lsa, bugungi kunda ularning soni 180 tadan oshdi. "O'zsanoatqurilishmateriallari" uyushmasiga a'zo korxonalarining o'zida joriy yilning yanvar-sentyabr oylarida 6-trillion so'mlik

mahsulot ishlab chiqarilgan, o'sish sur'ati o'tgan yilning shu davriga nisbatan 112,8 foizni tashkil qilgan.

Ta'kidlash joizki, sohaga investitsiyalarni keng jalb etish orqali mahsulot turlarini ko'paytirish va sifatni oshirish ustuvor vazifalar sirasiga kiradi. Jumladan, 2020 yilning to'qqiz oyida investitsiya dasturiga asosan 27 ta loyiha doirasida 228 million dollarlik (103,6 foiz) mablag'lar, shu jumladan, 150,7 million dollar (100,5 foiz) to'g'ridan-to'g'ri xorijiy investitsiyalar o'zlashtirilgan. 2021 yilda dasturga asosan 32 ta loyiha doirasidagi sarmoyalar 394,2 million dollarga yetishi, 284 mln dollar to'g'ridan-to'g'ri xorijiy investitsiyalar jalb etilishi ko'zlanyapti.

So'nggi yillarda qurilish materiallari sanoati sohasida olib borilayotgan tub islohotlar natijasida yangi turdagi innovatsion, eksportbop va import o'rnini bosuvchi qurilish materiallaridan gulqog'oz, suyuq gulqog'oz, zoloblok, gazoblok, penoblok, polistrolblok, kompozit (asbestosiz) shifer, o'tga chidamli g'isht, yumshoq tom yopqich materiallari, issiqlik izolyatsiyalash materiallari va mahsulotlari (bazaltli, mineralli, toshdan olingan), bazaltdan armatura, bazaltdan tola, bazaltdan setka, frita (kafellarga rang berishda ishlatiladigan xom ashyo), dekorativ bo'yoqlar, geotekstil, geomembrana, bentonit mat (to'shama), geosetka, georeshetka, geokompozitlar mahalliy ishlab chiqaruvchilar tomonidan o'zlashtirildi va ishlab chiqarilmoqda. Shuningdek, qurilish materiallarining sifatini belgilovchi standartlar xalqaro talablar bilan uyg'unlashtirilmoqda hamda 5458 ta xalqaro standartlar qabul qilindi (xalqaro va Yevropa (ISO, YEN) – 3987 ta, MDH mamlakatlari – 949 ta va milliy standartlar – 522 ta).

Jumladan, O'zbekiston Respublikasi Prezidentining 2019 yil 23 maydagi PQ-4335-son qarori 6-ilovasiga muvofiq, sifatli va xavfsiz yangi turdagi qurilish materiallarini ishlab chiqarishga joriy qilish maqsadida, qurilish materiallarini ishlab chiqarish bo'yicha 2019 yilda 340 ta va 2020 yilda 626 ta (qaror bilan 542 ta xalqaro standartlarni qabul qilish vazifasi belgilangan) xalqaro standartlar qabul qilindi, shu bilan birga 2021 yil oxirga qadar 505 ta xalqaro standartlar qabul qilinishi rejalashtirilgan.

Jahon tajribasi shuni ko'rsatadiki, korxonada ISO 9001 standarti talablariga javob beradigan sifat menejmenti tizimi (SMT)ni yaratish samaradorlik va rentabellikni oshirish, mijozlar ehtiyojini qondirishni ta'minlash, bozordagi mavqegini mustahkamlash, mahsulot va xizmatlar tannarxini pasaytirish, korxonaga (tashkilotga) ishonchni sezilarli darajada oshirish imkonini beradi.

Mahsulotlar sifati va raqobatdoshligini oshirish uchun milliy standartlarni jahon talablariga moslashtirish hamda korxonalarga joriy qilish juda muhim hisoblanadi. So'nggi yillarda mamlakatimizda standartlarning 43 foizi xalqaro me'yorlar bilan uyg'unlashtirilib, ularning soni 12 mingtaga yetkazildi. Bunday ishlar natijasida eksport imkoniyatlari kengaymoqda.

Zero, prezidentimiz ta'kidlaganidek, agar mahsulot xalqaro sertifikatga ega bo'lmasa, u hech qachon raqobatbardosh bo'la olmaydi. Mamlakatda har bir tadbirkor standartni bilishi, tanishi kerak, shunday muhit yaratish zarur.

Korxonada xalqaro standartlarga mos keladigan sifat menejmenti tizimini joriy etish uchun belgilangan me'yorlarda ko'zda tutilgan bir qator harakatlar amalga oshirilishi kerak. Tajribalar shuni ko'rsatadiki, ISO tizimi korxonada hayotiga "noldan" qat'iy kirishi uchun olti oydan 18 oygacha davom etadi. Bunday sharoitda rahbarlar mutaxassislarning yordamidan foydalanishlari yoki o'zlari zarur choralarini ko'rishlari talab etiladi.

Zamonaviy qarashlarga ko'ra, sifat menejmenti tizimi sifat menejmentini to'liq amalga oshirish imkonini beradigan bir qancha elementlarning mavjudligini nazarda tutadi. Bu elementlarga quyidagilar kiradi:

- ❖ sifat siyosati;
- ❖ sifatni rejalashtirish tizimi (sifat maqsadlarini belgilash, kerakli resurslarni aniqlash va boshqalar);
- ❖ tashkilotning jarayon modeli (jarayonlarning tavsifi, sxemalar, protseduralar, ko'rsatmalar va boshqalar);
- ❖ sifatni nazorat qilish tizimi (kiruvchi resurslar, yarim tayyor mahsulotlar, mahsulotlar, jarayonlar va boshqalar);
- ❖ mijozlar ehtiyojini qondirish monitoringi tizimi;
- ❖ ichki sifat nazorati tizimi;
- ❖ tashqi sifatni ta'minlash tizimi (ayniqsa, sertifikatlash holatida);
- ❖ jarayonlar va mahsulotlar uchun sifatli axborotni boshqarish tizimi (sifat yozuvlari);
- ❖ rahbariyat tomonidan sifatni tahlil qilish tizimi;
- ❖ sifatni doimiy yaxshilash tizimi;
- ❖ nomuvofiqliklarni boshqarish;
- ❖ tuzatish choralari;
- ❖ profilaktika choralari;
- ❖ tashqi yetkazib beruvchilarni boshqarish tizimi.

Sifat menejmenti tizimining arxitekturasini va uning elementlarini muayyan tashkilotda amalga oshirishning o'ziga xos usullari uning ko'lamini, profili, tuzilishi, madaniyati, boshqaruv uslubi, maqsadlari va boshqa omillarga bog'liq.

Sifat menejmenti tizimini ishlab chiqish va joriy etish ISO 9000 standartlariga muvofiq, qat'iy belgilangan tartib asosida amalga oshiriladi. U quyidagi bosqichlarni o'z ichiga oladi:

1-bosqich. Korxonada xodimlarini ISO 9000 seriyali standartlarda belgilangan sifat tamoyillariga o'rgatish. Nafaqat tashkilot va bo'limlar/bo'limlar rahbarlari, balki oddiy xodimlar ham.

2-bosqich. Korxonada amaldagi sifat menejmenti tizimini tahlil qilish. Ushbu bosqichning maqsadi mavjud SMT ISO 9000 seriyali standartlar talablariga qanday mos kelishini va unda nimani tuzatish / takomillashtirish kerakligini tushunishdir.

3-bosqich. Kelajakdagi SMT asoslarini ishlab chiqish. Ushbu bosqichda korxonaning asosiy va yordamchi jarayonlari aniqlanadi, tashkiliy tuzilma

yaratiladi yoki to'g'rılanadi, sifatni boshqarish sohasidagi boshqaruv va xodimlarning vazifalari taqsimlanadi.

4-bosqich. SMT hujjatlari to'plamini ishlab chiqish.

5-bosqich. SMTni joriy etish. Ushbu bosqichda xodimlarni SMT talablarini hisobga olgan holda ishlashga o'rgatiladi, korxonaning ichki auditini muntazam ravishda amalga oshiradigan auditorlar guruhini tanlash va o'qitish, ishlab chiqilgan talablarni hisobga olgan holda korxonaning ishlash jarayonlarini qayta qurish.

6-bosqich. Sertifikatlash. Sifat menejmenti tizimi sertifikatlashtirish organining mutaxassislari tomonidan sinovdan o'tkaziladi, agar u ijobiy bo'lsa, kompaniya ISO 9001 yoki 9000 oilasining boshqa standartiga muvofiqlik sertifikatini oladi.

Xulosa: Bir so'z bilan aytganda, sifat menejmenti tizimini samarali amalga oshirish uchun korxonada sifat menejmenti sohasidagi ishlarni, biznesjarayonlarni batafsil tahlil qilish, korxonada sifat menejmenti tizimini ishlab chiqish va joriy etish bo'yicha ishchi guruh tuzish, kompaniyaning sifat strategiyasini aniqlash kerak. Qurilish korxonalarida SMTni joriy qilish korxonada faoliyatini doimiy ravishda takomillashtirish hamda tashkilotning ichki va yashqi bozorda raqobatbardoshligini oshirish uchun ximati qiladi hamda har qanday tashkilotning raqobatbardoshligini belgilaydi.

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*Urinbayeva S.
Urganch davlat universiteti magistranti*

USMON AZIM SHE'RIYATIDA TABIAT TASVIRI VA INSON KECHINMALARI

Annotatsiya. Ushbu maqolada iste'dodli shoir Usmon Azim she'riyatidagi tabiat va tabiat hodisalarini tasvirlash, tarannum etish jihatlari o'rganildi. Tabiat tasviri bilan yo'g'rilgan she'rlar tahlili orqali ijodkor she'riyatining ayrim muhim xususiyatlari ochib beriladi. Peyzaj lirikasidagi insonning ruhiy holati va kayfiyatini manzaralashtirish masalalari o'rganildi.

Kalit so'zlar: tabiat lirikasi, peyzaj tasviri, psixologik tasvir, badiiy detallar, lirik qahramon, poetik ko'chim, metafora, lirik kechinma

*Urinbayeva S.
graduate student
Urganch State University*

IMAGERY OF NATURE AND HUMAN EXPERIENCES IN USMAN AZIM'S POETRY

Abstract. In this article, the aspects of describing and glorifying nature and natural phenomena in the poetry of the talented poet Usman Azim were studied. Some important features of the artist's poetry are revealed through the analysis of poems with nature images. The issues of beautifying the mental state and mood of a person in landscape lyrics were studied.

Key words: nature lyric, landscape image, psychological image, artistic details, lyrical hero, poetic movement, metaphor, lyrical experience.

Tabiat barcha san'at turlari va janrlari singari lirikaning ham boqiy mavzularidan biridir. San'at asarlarining qaysi birini olib qaramaylik, undagi peyzaj tasvirida albatta inson ishtirok etadi, tabiatning u yoki bu xossasi unga bo'lgan inson munosabati orqali qayta kashf etiladi; shu sababdan badiiy asardagi tabiat kartinalarida emotsional bo'yoqdorlik ufurib turadi. Shu ma'noda peyzaj lirikada inson his-tuyg'u va kechinmalarining yorqin tajassum topishi uchun fon va ayni vaqtda organik hujayra vazifasini o'taydi. Usmon Azim chizgan poetik manzaralar ko'z o'ngimizda yaqqol jonlanadi:

Tong titraydi kech kuzakning quchog'ida Yulduzlarni o'chirmoqda gulgun
shafaq Jonim, qalbm she'riyatning pichog'ida Zamin – tilsim, osmon – tilsim,
she'r beshavqat¹⁰¹

¹⁰¹ Usmon Azim. Saylanma. T.: „Sharq“, 1995. 1-bet

Misralardagi har bir soʻz shunday tanlangan va joylashtirilganki, soʻz yoki soʻzlar oʻrnini almashtirish badiiy mazmunga putur yetkazadi, deyarli har bir soʻzni poetizm (kuzak, gulgun, shafaq, zamin) darajasida baholash mumkin, har bir soʻzda metaforik koʻchim (titramoq, quchoq, oʻchirmoq, pichoq, tilsim, beshafqat) vujudga keltirilgan va ularning birikuvidan poetik talablarga mos keladigan obrazli ifodalar yuzaga keltirilgan. Usmon Azim uchun sheʼr – beshafqat, sheʼr – sheʼriyatning pichogʻi. Sheʼrda tabiat tasviri va mazmun goʻyo bir-birini inkor etgan individual metafora, oʻxshatish va parafrazalardan tuzilgandek, aslida maqsad bitta: individual betakror obraz yaratish.

Ohista-ohista yogʻadi yomgʻir, Ohista-ohista qoʻzgʻalar shamol. Ohista-ohista toʻkar yumshoq nur Bulutlar bagʻridan koʻringan hilol.¹⁰²

Shoir oʻz hislarini qalamga koʻchiradi. Fikrlarini hayotiy tafsillar bilan asoslashga intiladi-ki, sheʼrni oʻqiganimizda tabiiy lavhalarga hamohang boʻlgan asosli vaziyat koʻz oʻngimizda gavdalanadi. Tabiatdagi narsa va hodisalarni jonlantirish, shaxslantirish orqali hosil boʻluvchi tashxis sanʼati qoʻllangan ushbu parchada lirik qahramonning ruhiy holatini ifoda etadi. “Oʻxshatish - sheʼriyat, kartina-sheʼriyat, voqea sheʼr bop boʻlishi mumkin, tabiat – sheʼriyat, his-tuygʻu-sheʼriyat”¹⁰³ Koʻrinadiki, lirikada peyzajning vazifasi gʻoyat keng va rang-barangdir. U atrof-tevaragimizdagi narsa va buyumlar tabiatidagi goʻzallikni namoyon etish orqali estetik didimizni oʻstiradi; shuningdek, ona oʻlka timsoli, uning poetik obrazlari sifatida ham tajassum topadi.

Quyosh oʻzi ming-ming asrkim, Oʻt ismini yillarga oʻymish Tush. Saraton ketmon chopar jim –U ismini unutib qoʻymish.¹⁰⁴

Tabiat “oʻtli quyosh” dan iliqlik olib yana tilga kiradi. Shoir “saraton” obrazi orqali xalqimiz bagʻriga yashiringan oʻzlikni sheʼrxonga anglatmoqchi. Saraton - zahmatkash, sodda, ayni paytda, odamzodga xos mehr-oqibat va hamiyatni, birdamlikni oʻzida mujassamlashtirgan dehqon. Ushbu lirik chizgi shoiraning inson va tabiat rishtalarini ifoda etishdagi ijodiy metodi sifatida koʻzga tashlanadi.

Bogʻ qoʻynida ikki daraxt Bir-biriga intizor. Sen — bir daraxt, Men — bir daraxt Kuyib-kuyib oʻtdik, yor.¹⁰⁵

Usmon Azim lirik chizgilari orqali tabiatni inson botiniga koʻchiradi. Lirik qahramon – daraxtga qiyoslanadi. Demak, tabiat ham insonga aylanyapti, insonlar kabi his-tuygʻulari bilan boʻlishyapti. “Tabiat barcha sanʼat turlari va janrlari qatori lirikaning ham boqiy mavzularidan biridir. Sanʼat asarlarining qaysi birini olib koʻrmaylik, undagi peyzaj tasvirida, albatta, inson ishtirok etadi, tabiatning u yoki bu xossasi unga boʻlgan inson munosabati orqali qayta kashf etiladi”¹⁰⁶

¹⁰² Oʻsha manba. 24-bet.

¹⁰³ Olimjon H.. III tomlik, “Tanlangan asarlar”, III tom, 132-bet.

¹⁰⁴ Azim Usmon. Sogʻinch/Sheʼrlar. “Oʻzbekiston milliy ensiklopediyasi”. 2007.37-bet

¹⁰⁵ Oʻsha manba.39-bet

¹⁰⁶ Rahimjonov H. Davr va oʻzbek lirikasi. – T.:Fan, 1979. 156-bet

Yomg'irli kechada falakka uchdim, Shamollar yuzimga yopishdi – ivib.
Yulduzlar armonli shivirga tushdi:–Yomg'irning hidi-ku, –Yomg'irning hidi.¹⁰⁷

Demak, tabiatning insonga ko'rsatuvchi eng buyuk ta'sir kuchlaridan biri uning fikr va his-tuyg'u uyg'otishidir. Sharros urib quygan yomg'ir, yulduzlarning armonli shivirlashi, gir-gir aylanib yurib yuzimizga qo'nguvchi laylak qor, dengiz shovullashi, shamollarning munis ertagi, momoqaldiroq sadosi, tog'lar salobati – hamma-hammasi muayyan o'y-fikrlar va his-tuyg'ular silsilasini vujudga keltirish bilan barobar ana shu tashqi dunyoni idrok etishga bo'lgan kuchli intilishni yuzaga keltiradi. Bu intilishning mohiyati obyektiv voqelikni yanada chuqurroq idrok etishdan iboratdir.

Osmon cho'g' elaydi. Tunni tiralab Uchqunlar – og'ritib botadi ko'zga. Men sezib turibman titranmoqda lab, O'chgan yulduzlarday yosh oqar ko'zdan.

Tabiat tasviri, lirik kechinmalar orqali shoirning teran tuyg'ulari va fikrlaridan, shuning bilan birgalikda, davr, voqelik, odamlar, hayot to'g'risidagi, insonning voqelikdagi o'rni xususidagi chuqur o'y-mushohadalaridan voqif bo'lamiz. Bunday asarlarda tabiat faqatgina fon emas, balki asar umumiy g'oyasi va mazmunining ajralmas qismiga aylanadi va ma'lum darajada shoir kechinmalarining, u ilgari surmoqchi bo'layotgan g'oya va mazmunning bir qismi bo'lib qoladi.

Bir sovuq qayg'uga duch keladi qo'lqayga borishini bilmaydi shamol. Daraxtga urilar, barglarni yular, Uning g'azabidan bo'lmaydi poymol – Bizning jim turishdan uchgan qayg'ular.¹⁰⁸

Usmon Azimning har bir peyzaj she'rini uning lirik e'tirofidek qabul qilamiz. Shoirning she'rlarida peyzaj insoniy ruh, muhabbat, dard, sevinch, xullas, emotsional kechinmalarni o'ziga singdirgan holda tasvirlanadi. Barcha poetik vositalar ana shu maqsadga xizmat qiladi. Shoir tasvirida tun, oqshom, bahor suvlari, dengiz manzaralari, o'tloqlar va boshqa omillarning o'quvchiga ta'sir ko'rsatishiga, emotsional kechinma va fikr uyg'otishiga sabab, shoir ular orqali inson qalbini, insonning ichki dunyosini ochib beradi.

Odatda poetik soddalik har xil bo'ladi. Usmon Azim lirikasida yuksak soddalik san'ati borki, bu ilhombaxsh izlanish, ijodiy mehnat samarasidir. Soddalik – bu poetik shakl va mazmunning organik birligi mevasidir. Bu mukammallik va yaxlitlikka erishishda shoirning ulkan ijodiy mashaqqatlari u qadar sezilmagandek, she'r go'yo shundoqqina yozilib qolgandek, yurakdan oqib tushgandek, ko'ngilning tub-tubidan quyilib kelgandek bo'ladi. Vaholanki, bu poetik soddalik shoirning yetuk mahorati hosilasidir.

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Usmanov B.K.
Andijon qishloq xo'jaligi va agrotexnologiya
instituti O'zbek tili pedagogika va jismoniy
madaniyat kafedrası o'qituvchisi

O'RTA MASOFAGA YUGURISH TEXNNKASI

Annotatsiya. O'zbekiston o'z mustaqilligini qo'lga kiritgan dastlabki kunlardanoq jismoniy tarbiya va sportni rivojlantirish, sog'lom turmush tarzini targ'ib qilishishlariga katta e'tibor berib kelinmoqda. Ushby maqola barkamol yosh avlodni sog'lom hayot uchun yurish va yugurish mashg'ulotlari haqida texnikalarni qo'llashlari haqida fikrlar bayon etilgan.

Kalit so'zlari: Tizza, siyosat, burilish, xarakat, sog'lom

Usmanov B.K.
teacher
Uzbek language pedagogy and physical culture department
Andijan Institute of Agriculture and Agrotechnology

MIDDLE DISTANCE RUNNING TECHNIQUE

Abstract. Since the first days of independence in Uzbekistan, much attention has been paid to the development of physical culture and sports, and the promotion of a healthy lifestyle. Ushby's article provides ideas on how to use walking and running training techniques for healthy younger generations.

Key words: Knee, politics, turn, movement, healthy.

Inson butun umri davomida o'zgarib boradi. U xam ijtimoiy, xam psixik jixatdan kamolga yetadi, bunda bolaga berilayotgan tarbiya maqsadga muvofiq bo'lsa, u jamiyat a'zosi sifatida kamol topib, murakkab ijtimoiy munosabatlar tizimida o'ziga munosib o'rin egallaydi. Chunki rivojlanish tarbiya ta'siri ostida boradi. Shaxsning fazilatlarini to'g'ri ko'rish va bexato baxolash uchun uni turli munosabatlar jaoayonida kuzatish lozim.[1]

Barkamol yosh avlodni tarbiyalash davlat siyosatining ustivor yo'nalishlaridan biri sifatida belgilandi. Bu borada qator farmon va qarorlar qabul qilindi. Mamlakatimizda olib borilayotgan keng ko'lamlı ishlar oliy ta'lim muassasasi jismoniy tarbiya va sport kafedralari professor-o'qituvchilari xamda murabbiylar zimmasiga ulkan ma'suliyat yuklaydi. Jismoniy tarbiya va sport yoshlarni xayotga, ijtimoiy foydali mexnatga tayyorlash, jismoniy qobiliyatlarini mukammallashtirish, Vatan mudofaasiga tayyorlash, ularning bekamiko'st kamol topishlariga xizmat qiladi.

Yugurishni kursatuvchi to'g'ri yulda xam, burilishda xam (burilishni to'la utmasa xam bo'ladi) yugurib kursatishi kerak.

2-vazifa. To'g'ri yulkada yugurish texnikasini o'rgatish.

Mashqlar. 1. To'g'ri yulkada yugurish texnikasini tushuntirish va kursatish. 2. 80-100 m masofalarda takror-takror yugurish. 3. Tizzani baland-baland kutarib yugurish, sakrab-sakrab yugurish, bedana kadam yugurish, boldirii orkaga siltab yugurish, joyda turib kul xarakatlariga taktid kilish va x.k.

Uslubiy kursatma. Bu vazifani xal etishda o'qituvchi oyoq tagini erga to'g'ri kuyishni, depsinishni, silkinch oyoq sommni olg'a chikarishni, yugurish paytida kullarni to'g'ri xarakatlantirishni o'rgatishi kerak.

Dastlabki yugurib utishlarda tezlik kam, keyin esa o'rtacha tezlikda yuguriladi. Bunda turux-guruh bo'lib xam, yakka-yakka xam yuguriladi.

O'qituvchi avvalo ko'pol xatolarni tuzata boshlaydi: xarakatlar umuman kovushmayotganini, son bilan, kutarilmayotganini, depsinish to'la bulmayotganini, gavda oldinga yoki orkaga xaddan tashkari ogib ketayotganini, yon tomonlarga tebranishlarni va shu kabilarni, yugurib o'tish paytlarda o'qituvchi xar qaysi sportchining texnikaviy shaxsiy kamchiliklarini va o'z xususiyatlarini belgilaydi.

3-vazifa. Yulkaning burilishida yugurish texnikasini o'rgatish.

Mashqlar. Burilishda yugurish texnikasini tushuntirish va k o'rsatish.

2. Norman kichraytirilgan radiusli yulaklarda takror-takror yugurish. 3. To'g'ri yulakdan burilishga kirib borishda va aksincha, burilishdan to'g'ri yulga chikishda yugurish.

Uslubiy ko'rsatma. Uchinchi vaznfaning xal etilishy o'quvchining tufi yulakda yugurishni kanday uzlashtirgan ekaniga boglik Agarda burilishda yuguruvchining xarakaglari erkin bulmasa, u paytda tufi yulakda yugurishga kaytish ma'kul.

Aylana radiusni kichraytirib, 10-15 m gacha keltirish mumkin. Gavdaning aylana ichkarisi gomon engashish darajasi burilish radiusi kanchalik keskin ekaniga va yugurish tezligiga botik. Burilish radiusi kancha kichik bo'lib, yugurish tezligi kancha yuqori bulsa, gavda shuncha ko'p engashadi.

4-vazifa. Yuqori start texnikasini va start tezlanishni o'rgatish.

Mashqlar. 1. Yuqori startdan yugurishni kursatish. 2. "Startga!" va "Diqqat!" buyro'qlarini bajarish va "Marsh!" buyrugidan keyin 20-30 m ga yugurish. 3. Yuqori startdan keyin start tezlanishiga, undan keyin esa erkin yugurishga o'tish. Masofa 60-70 m gacha. 4. Burilish boshlanishida yuqori start olish.

Uslubiy qo'rsatma. Urganishning boshida yuqori start olishni buyro'qsiz, talabalarining o'zlari mustaqil, keyin 3-5 tadan guruh-guruh bo'lib buyro'q bilan bajaradilar.

O'rganish vaqti da "Diqqat" buyrugidan keyin "Marsh!" buyrugi gacha (o'quzilsa tuzo'qroq) bulgan pauza ancha Uzoq, (4-5 sek) bo'ladi, chunki to'g'ri turib olishga ulgurishlari kerak. Bora-bora pauza normal darajada qisqartiriladi. Boshni tufi tutishga (dastlabki qadamlar tushadigan joyga qaraladi) etibor berish lozim. Start tezlanishida tetik o'rgangan sari gavda tuklana boradi.

5-vazifa. O'rta va uzoq masofacharga yugurish texnikasini takomshshashtirish.

Mashqlar. 1. 100 m dan 200 m gacha yugurishni takrorlash. 2. 400 m masofada tezlikni o'zgartirib va gezlaniy yugurish. 3. Yuqori startdan 400-800 m ga yugurib, masofa oxirida tezlanish.

Uslubiy ko'rsatma. Talabalardan ba'zanlari ortiqcha kuchlanib, juda xam tirishib kluradilar, lekin xech qanday maslaxat yoki tushuntirishdan foyda chiqmaydi. Bunday xollarda 400 m ga va undan xam ortiqroq masofaga o'rtacha tezlikda yugurish tuzo'q natija beradi. Chunki charchay boshlagan odam bemalolroq tejamliror klura boshlaydi. Depsinishga (depsinadigan oyoq to'g'rilanishiga) aloxida e'tibor berish lozim.

1. O'rta va uzoq masofalarga yugurishning to'g'ri texnikasini bilib olish.
2. Sportchining umumiy jismoniy tayyorgarligi darajasini yaxshilash.
3. Umumiy va maxsus chidamlilikni o'rta va uzoq masofalarga yugurishga moslab rivojlantirish.

4. 100, 200 va 400 m ga sprintcha yurishda tezlikni oshirish.

5. Yugurishda "tezlikni his etishni" tarbiyalash.

6. Nafas olish ritmini urganib olish.

7. Yuguruvchining axloqiy va irodaviy fazilatlarini oshirish.

8. Masofani yugurib utishning optimal taktik variantlarini topish.

9. Nazariy tayyorgarlik olib borish.

O'qituvchi oyoq tagini erga to'g'ri qo'yishni, depsinishni, qo'llarning to'g'ri harakatlariga e'tibor berishi lozim. Yugurishda avval tezlik kam, keyin esa o'rtacha tezlikda bo'lishi kerak. Bunda guruh-guruh bo'lib hamda yakka-yakka yugurish mumkin. O'qituvchi har bir sportchi kamchiliklarini ko'rsatib berishi lozim.

3-vazifa. Yo'lkaning burilishida yugurish texnikasini o'rga-tish.

Vositalar:

1. Burilishda yugurish texnikasini ko'rsatish va tushuntirish.

2. 80-100 m masofani takror-takror yugurish.

3. Maxsus yugurish mashqlarini avval katta radiusli yo'lkada, so'ngra asta sekin kichik radiusli yo'lkada bajarish.

4. To'g'ri yo'lkadan burilishga kirib borishda va aksincha, burilishdan to'g'ri yo'lkaga chiqishda yugurish.

Uslubiy ko'rsatma. Burilishda shug'ullanuvchining harakati erkin bo'lishi kerak. Aylana radiusini kichraytirib, 10-15 m gacha keltirish mumkin. Gavdaning aylana ichkarisi tomon egilish darajasi burilish radiusining o'tkirligiga va yugurish tezligiga bog'liq. Burilish radiusiga qarab yugurish tezligi yuqori bo'lsa, gavda shuncha ko'p egiladi.

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DEVELOPMENT OF COGNITIVE EMOTIONAL RESPONSE TO MUSIC IN CHILDREN

Abstract. This article presents the theoretical foundations of the development of perception and emotional response to music in children. Music is an art form that reflects human emotional experiences, thoughts, imagination through a set of musical sounds, therefore it is necessary to teach it from preschool age.

Key words: Music, human, emotional, experiences, imagination, musical artistic image, perception, emotion.

Music is an art form that reflects human emotional experiences, thoughts, imagination through a set of musical sounds. Its content consists of specific musical artistic images that represent changing mental states. He has the ability to penetrate deeply into the human heart and express this feeling of the soul vividly. The interest in music awakened from youth has a strong influence on the further musical development of a person, ensures the formation of other skills and tastes, cultivates a good musical taste. In addition, music clearly reflects the willful qualities of a person, his nature. These expressive and pictorial possibilities of music were highly appreciated by Eastern thinkers - Farabi, Ibn Sina, Jami, Nawai, Babur and others. According to the Greek philosopher Plato, the power of the state directly depends on what music, what tone and rhythm it plays. He believed that the country needs music that helps people to rise to the top. Aesthetic perception is a combination of two main components: emotionality and comprehensibility, but imagination and movement moment-rhythm are also added to it. Music is a great source of aesthetic and spiritual mood.

We will be able to see the bright future of our country in the form of musical education of preschool children and its development. Taking into account the great impact of music on the child's emotions and formation, on understanding and feeling its content, the appropriate use of correctly presented musical works takes place in the category. The main source of the formation of musical images is directly related to the compatibility of nature and human speech, perception of beauty in the surrounding world. It is important to define the function and content of musical perception. These are determined by the general goals related to the all-round development of the individual, including the tasks of aesthetic education. Such tasks should be to attract children to activities in the field of music, to develop aesthetic perception and emotional assimilation of artistic music, to cultivate love for it, to develop musical ability, to form musical taste, and to develop children's artistic creativity. The most striking features of the

development of musical perception in children are the sense of hearing, the musical ear, the quality and levels of emotional response to music of various natures. When properly organizing music lessons in a preschool educational organization, the music director should take into account the young characteristics and psychological development of each child. A child's perception of music goes through several stages in its development. Music and happiness are inextricably linked in the child's mind.

When choosing a repertoire for children of a small group, choosing more figurative works will help children to perceive these works through figurative imagination when listening and singing. Children begin to accumulate musical impressions based on the development of feelings, hearing, and perception. Day by day, the boundaries of perception of the environment expand, and certain feelings and images of children begin to form under the influence of music. Children act figuratively to the selected works, for example: jumping as a rabbit, walking like a bear, helps them to easily perceive these works, they know familiar music, distinguish march, run, alla music, distinguish the quiet and cheerful nature of music, but it is young due to the strength of their characteristics, they cannot express it in words.

In addition, when working with 3-4-year-old children, the use of guided-visual methods: color pictures, toys, referring to various manuals will help a lot. At the age of 4-5, children detail the images, partially distinguish the contrasting characters of music, understand the forms and means of expressiveness of musical works. In order to create active activity during the training, the music director illuminates the content of the work through singing, playing, and listening through figurative and poetic words, stimulates the children's imagination, calls images involves him in the act of thinking based on the content to the content of the piece of music.

When the music director talks to the children about the studied works, it makes it easier for the children to understand these works, and the scope of the children's imagination expands. Children of this age respond verbally to the questions and demands of the music director. They can sing a small song independently without the help of adults, accustoming children to dance to selected works to a certain extent and perform many actions that allow them to play independently serves to further develop cognitive features. 6-7-year-old children's perception of the works they listen to can be summarized using the following terms: introduction, verse, refrain, tempo, dynamic signs, familiarity, differentiation, comparison of opposite and similar parts of the work, sound, rhythm, etc. They understand the character and means of expressiveness of the music and pay attention to the images of the game, so it is reasonable for the music director to choose larger works. Listening to works of various genres and teaching songs to children of this age helps to develop children's intellectual abilities. Based on the acquired knowledge and impressions of music, children can not only

answer the question, but also independently describe a piece of music, understand its means of expression, and feel the different moods conveyed by music.

1) Thus, the education of musical perception goes as follows:

2) Extraction of musical material

3) Systematization of education and training methods.

4) Using different stages of work

5) Using different themes of musical works.

6) Gradually increasing the complexity of musical works depending on the number and form of images.

The works of E. Mach, K. Stumpf, M. Meyer, O. Abraham, W. Köhler, W. Wundt, G. Reves and other foreign scientists also made a great contribution to the development of music psychology. Musical perception is a very complex and multifaceted process. As E.N. Fedorovich and E.V. According to Tikhonov, musical perception involves combining in the mind of the perceiver a large number of different elements belonging to different levels and systems. When studying the processes of musical perception, the following are analyzed:

a) connection of the result of perception with previous experience, which depends not only on the properties of the object, but also on the properties of the perceiving subject.

b) It defines qualitative differences in musical perception of professionals and non-professionals, children and adults, individual differences;

c) the temporary nature of music, which determines the need to perceive a continuous flow and its separate points at the same time, which is related to both individual psychic mechanisms and the content and structure of musical works;

d) formation of preferences for the perception of music of different levels of complexity (serious or light) in the public mind, which allows analyzing the socio-cultural characteristics of society

While perceiving music, the child should be able to feel its beauty and perfection. The main characteristics of knowing a musical work are integrity, emotionality, consciousness and imagery. The whole provides the perception of a musical work based on the expressiveness of individual elements of musical speech: melody, harmony, rhythm, timbre. Emotionality means experiencing the beauty of the music, the feelings and moods evoked by the music.

Awareness is related to aesthetic evaluation and understanding of the content of music, its ideas, the nature of experiences and all the expressive means that make up the musical image. Finally, imagery is the listener's creation of an image of a piece of music based on his ideas about music as a whole and its particular means of expression.

The process of music perception begins in early childhood, the mental characteristics of the child at each age stage affect the course of this process and its results.

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*Xakimova N.J.
assistant
Toshkent Davlat Transport Universiteti
O'zbekiston, Toshkent sh.*

CHIZMA GEOMETRIYA VA MUHANDISLIK KOMPYUTER GRAFIKASI FANINIDA AUTOCAD DASTURINI O'QITISH JARAYONINI JADALLASHTIRISH

Аннотация. Auto Cad saytlari ishi juda samarali muhandislik grafikasini beradi. Fan va texnika taraqqiyoti jadallashgan bozor iqtisodiyoti sharoitida faoliyat ko'rsatuvchi yuksak malakali, raqobatbardosh mutaxassislar tayyorlashning muhim omillaridan biri oliy ta'lim tizimida ta'lim olayotgan talabalarni tasavvur grafik tayyorgarligini jadallashtirishdir.

Kalit so'zlari: texnika, ijod, muxandis, goya, interaktiv, tasavvur, fazo.

*Khakimova N.J.
assistant
Tashkent State Transport University
Uzbekistan, Tashkent sh.*

ACCELERATION OF AUTOCAD TRAINING PROCESS IN DRAWING GEOMETRY AND ENGINEERING COMPUTER GRAPHICS

Annotation. The work of Auto Cad sites provides very effective engineering graphics. One of the important factors of training of highly qualified, competitive specialists operating in the conditions of the market economy with accelerated development of science and technology is to accelerate the graphic preparation of students studying in the higher education system.

Keywords: technology, creativity, engineer, interactive, imagination, space.

Fan va texnika taraqqiyoti jadallashgan bozor iqtisodiyoti sharoitida faoliyat ko'rsatuvchi yuksak malakali, raqobatbardosh mutaxassislar tayyorlashning muhim omillaridan biri oliy ta'lim tizimida ta'lim olayotgan talabalarni tasavvur grafik tayyorgarligini jadallashtirishdir.

Hozirgi zamon ishlab chiqarishida chizmaga g'oyat katta talablar qo'yilmoqdaki, bu talabalarni barchasini bilish va chizmani bajarishda qabul qilingan turli belgilashlarni tushuna bilish ishchidan boshlab, to muhandis konstruktorgacha bo'lgan mutaxassislarning keng doirasi uchun mutlaqo zaruriy shart bo'lib hisoblanadi. Muhandislar o'z ijodiy ish faoliyatlarida albatta chizmalardan foydalanadilar, shuningdek chizma loyihalarni ishlab chiqadilar.

Zamonaviy oliy ta'limda muhandisning grafik tayyorgarligi uning professionallik sifatlaridan biri bo'lib, grafik bilim va malakalarning muayyan darajasi, keng fazoviy tasavvur va politexnik tafakkur bilan uyg'unlashgan tayyorgarlikdir.

Hozirgi zamonaviy oliy ta'limda kompyuter grafikasi professional tayyorgarligining eng muhim omili sifatida namoyon bo'ladi. Oliy ta'limda muhandislarning grafik tayyorgarligini jadallashtirishdagi asosiy g'oyalar sifatida quyidagilarni qarash mumkin:

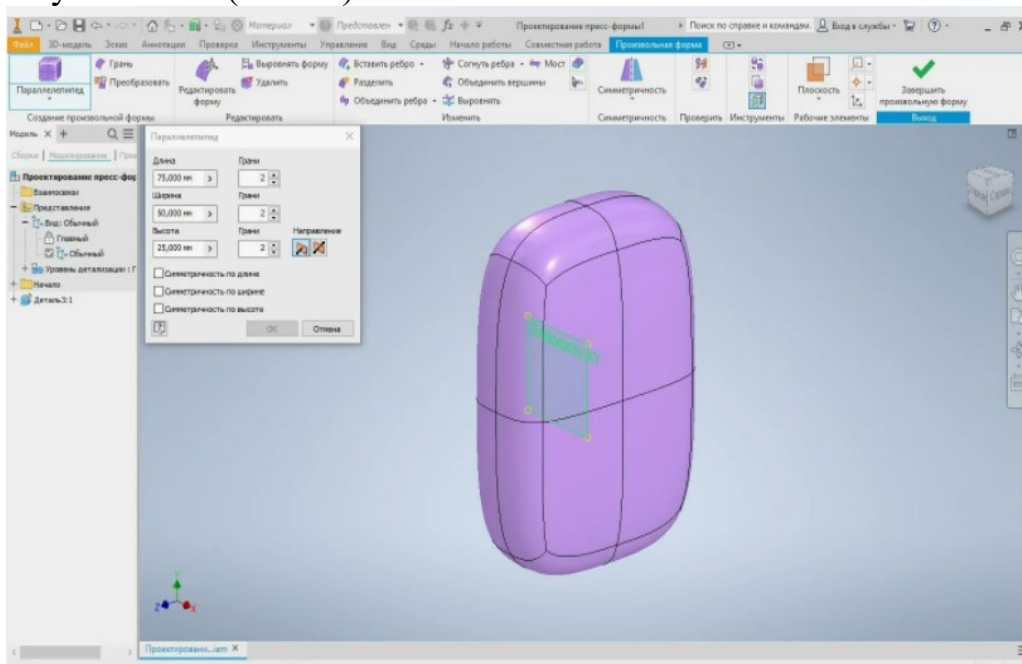
- Grafikaviy ta'limni jadallashtirish ma'lum tizimga soling tamoyillarga asoslanishi lozim.

- Grafik ta'limni jadallashtirish ma'lum vositalar asosida amalga oshiriladiki, ularni aniqlash va tartiblash muhim ahamiyatga ega.

Grafik tayyorgarlikni jadallashtirish vositalarini shartli ravishda uch turga ajratish mumkin: o'quv materialining o'zgargan shakllari sifatida qo'llaniladigan vositalar; dasturiy vositalar; kompyuter bilan bog'liq texnik vositalar (kompyuter grafikasi).

Grafik tayyorgarlik jarayonini jadallashtirish predmeti o'quv materialini turli shakllarda ifodalanadi. Ularni talabalarga yetkazishda jadallashtirish imkoniyatlarini o'rganish grafikaviy ta'lim jarayonini jadallashtirishning asosini tashkil etadi. Talabalarning grafik tayyorgarlik jarayonini kompyuter grafikasi vositasida jadallashtirishda grafikaviy dasturlar muhim rol o'ynaydi. Shu bois, bunday vositalaridan foydalanishga qo'yiladigan talablarni oydinlashtirish joiz.

Grafikaviy dastur vositalaridan foydalanish grafikaviy tasvirlash xususiyatlariga asoslanadi, xususan illyustratsiya yaratish (vektorli-(CoreIDRAW!)), tasvirlarni tahrir qilish (rastrlil –Adobe PhotoShop) va ikki hamda uch o'lchamli tasvirlar hosil qilish uchun dastur (ArhiCAD,AutoCAD) lardan foydalaniladi.(1-rasm)



1-рasm. O'lchamli tasvirlar hosil qilish

Oliy ta'limdagi mutaxassislarni grafik tayyorgarlik jarayonini jadallashtirishda kompyuter grafikasi o'qitish vositasi emas, balki bo'lajak mutaxassislarni zamonaviy ishlab chiqarish talablari asosida ALT (SAPR)da loyihalash faoliyatiga tayyorlash vositasi sifatida o'rgatiladi.

Bunda kompyuter grafikasi (kompyuterda chizmani bajarish) ta'limida o'qituvchining faoliyati yetakchi o'rin tutadi. Bu holda kompyuterda chizmalarni bajarishni o'rgatishda ta'limning interaktiv usullari qo'llaniladi. Interaktivlik o'zaro harakat qilish, ya'ni suhbatlashish, nima bilandir (masalan, kompyuter bilan) yoki kim (o'qituvchi) bilandir muloqat qilishi natijasida amalga oshiriladi.

Shuni ta'kidlash lozimki, interaktiv ta'lim –bu aniq va rejalashtirilgan maqsadga ega bo'lgan, bilish faoliyatini tashkil etishning maxsus shaklidir. AutoCAD chizma ishlarini bajarish uchun mo'ljallangan bo'lib, demak siz ushbu elementar ob'ektlarning barchasini chiziqlar, doiralar shaklida tasvirlashingiz, o'lchamlarni pastga tushirishingiz, ob'ektlarni siljitishingiz, o'chirishingiz va nusxalashingiz kerak. Shunday qilib,

AutoCAD ni ishga tushiring, ekranga qarang, bu vositalarning barchasi shunchaki ajoyib!

Bu Excel bilan ishlashga o'xshash narsa. Ko'pchilik, ular hech qachon elektron jadval protsessorini ishlamaganliklari haqida shubha qilishmaydi, ular buni juda yaxshi bilishadi ha, Excel bizning jadvallar bilan "qog'ozdagi" barcha ishimizga taqlid qiladi.

Keyin biz Excelni ishga tushiramiz va ushbu jadvalni ko'z o'ngimizda ko'ramiz, ma'lumotlarni kiritishni boshlaymiz, ko'zlarimiz oldida hamma tanish Word vositalari.

Albatta, nuances bor, lekin unchalik ko'p emas, ikkinchisidagi asosiy narsa yangi narsalarga oddiy va o'ychan qarash, bu holda ekran sizga nimani taklif qilayotganini tahlil qilishdir. Ushbu xulosalar har qanday dastur uchun juda muhimdir, ularni oddiy ibora bilan ifodalash mumkin hamma narsa ko'rinadiganidan ancha sodda.

Davom etamiz biz o'zimizga yordam berishimiz kerak, hamma narsadan qo'rqmasdan, hatto ekranga qaramasdan.

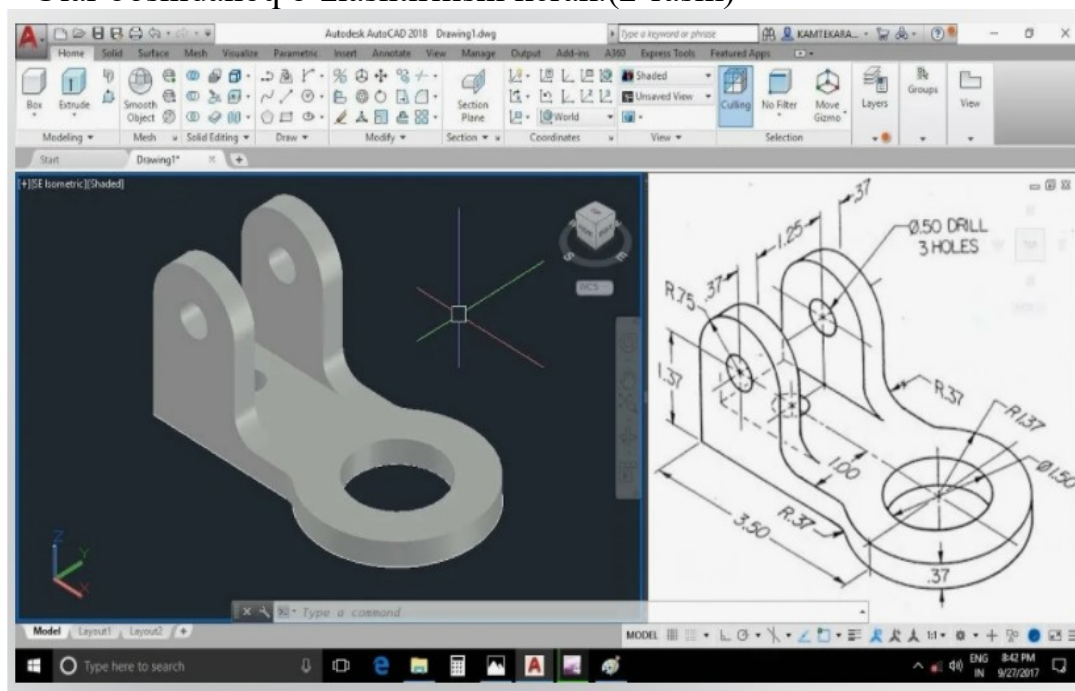
Bu xulosalar AutoCAD-da ishlash uchun printsiplal jihatdan muhimdir, 2000, 2011, 2017 yoki 2019 versiyasi bo'ladimi, bundan buyon ahamiyati yo'q. Nuances orasida biz o'zlashtirishga to'g'ri va eng muhimi ijodiy yondashuvni aniqlaymiz.

O'zingizning vaqtingizni oling, kichkina ishlang avval 2D elementlari bilan ishlash tamoyillarini ishlab chiqishni boshlang, so'ngra rivojlangan 3D unchalik qiyin ko'rinmaydi. Keyin yorug'lik manbalarini sozlash, rang berish va hatto 3D Max bilan aloqani o'rnatish kerak bo'ladi. Jamoalar juda ko'p, shuning uchun undagi barcha jamoalarni muhimlik darajasi foydalanish chastotasi bo'yicha saralash orqali o'zingiz uchun kutubxona yaratishga to'sqinlik qilmaydi.

AutoCAD ning sozlash qobiliyatining alohida kutubxonasini yaratganingizga ham ishonch hosil qiling juda ko'p sozlamalar mavjud, ular o'nlab boshqa dasturlarda davom etadi.

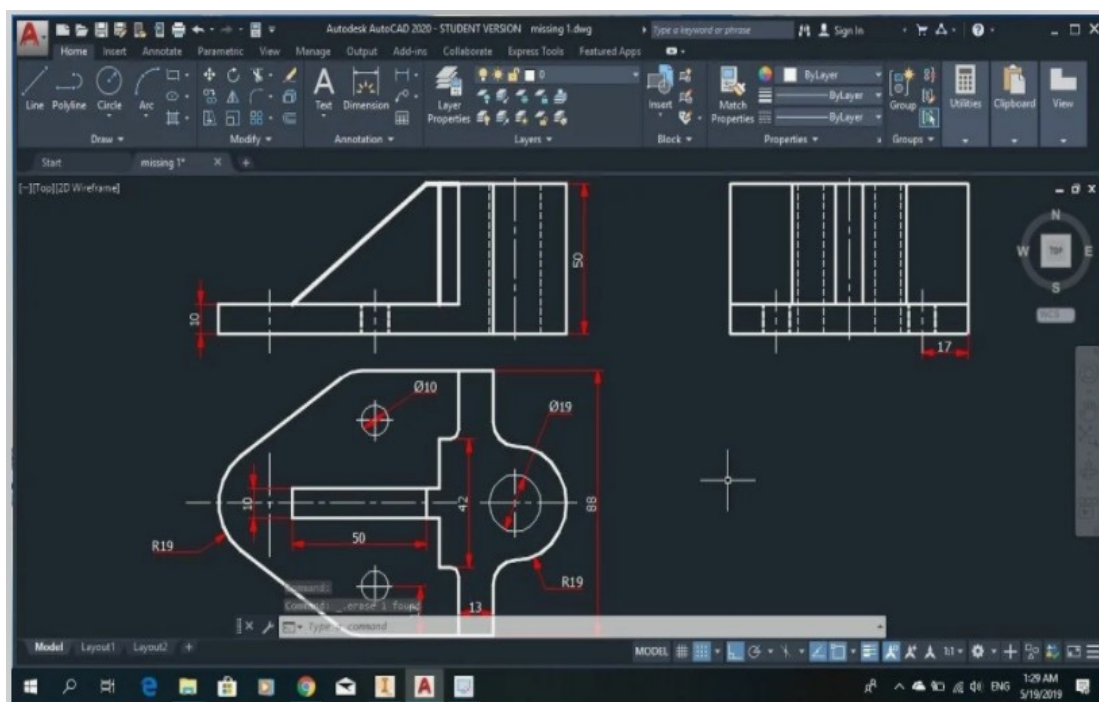
Sozlamalarni o'rganish dasturni o'zlashtirishda katta yordam beradi. Albatta, ushbu sozlamalar va asboblar paneli sozlamalari orasida.

Ular boshidanoq o'zlashtirilishi kerak.(2-rasm)



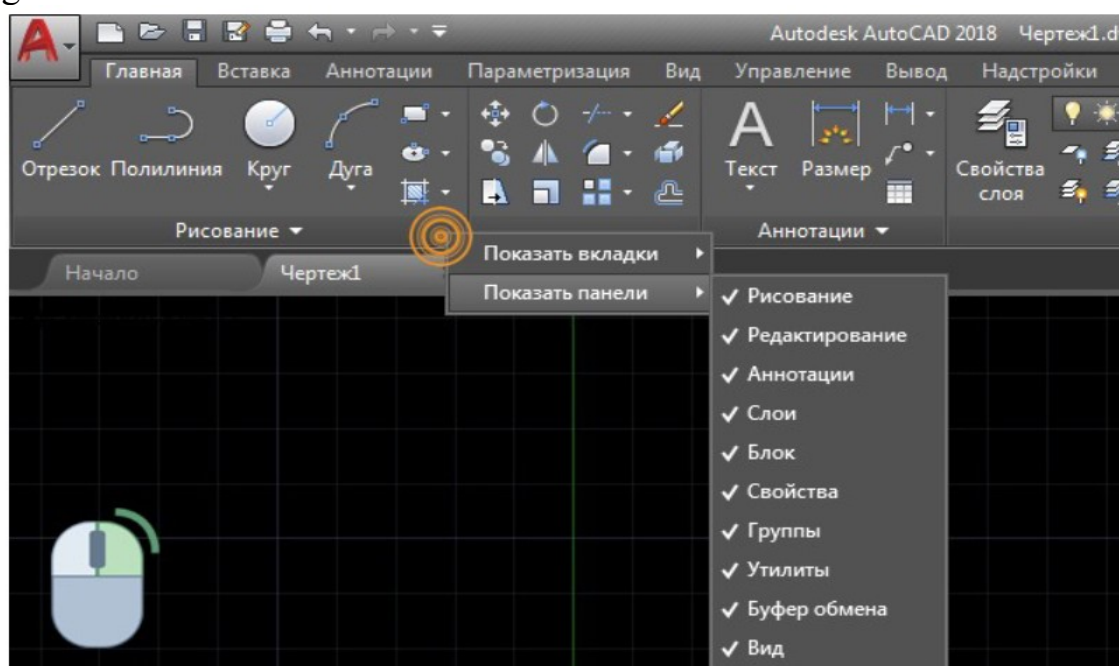
2-rasm. AutoCAD chizma ishlarini bajarish

Birinchiidan, dasturda deyarli yigirma o'nga yaqin asboblar paneli mavjud, ammo dastlab faqat ko'rsatiladi Ikkinchiidan, vositalarga kelsak, ular odatdagidek, doimiy ravishda bo'lishga zarar keltirmaydigan narsalarning beshdan bir qismidan kamrog'ini tashkil qiladi.(3-rasm)



3-rasm. AutoCAD chizma ishlarini bajarish

Oliy talimdagi mutaxassislarni grafik tayyorgarligini mazmun va tuzilmasini ishlab chiqishda quyidagilarga rioya etiladi:(4-rasm)
 grafikaviy tayyorgarlikda uzluksizlik va uzviylik;
 grafikaviy faoliyat ob'ekti nazariyasining ustivorligi;
 nazariya va amaliyot birligi;
 standart va nostandart ijodiy grafik masalalarni yechish usullarini o'rgatish.



4-rasm. Grafik masalalarni yechish usullarini

Shunday qilib, oliy ta'limida bo'lajak muxandis mutaxassislarining grafik tayyorgarligini jadallashtirish muammosi qo'yidagi masalalarni yechish vazifasini qo'ymoqda:

1. Fan-texnika va texnologiyalar taraqqiyoti hamda zamonaviy ishlab chiqarish talablariga asosan bo'lajak mutaxassislarining grafik tayyorgarlik tuzilmasi va mazmunini modernizatsiya qilish;

2. Bo'lajak muxandislarni grafik faoliyatga tayyorlashning pedagogik psixologik jihatlarini o'rganish.

Foydalanilgan adabiyotlar:

1. O'zbekiston Respublikasi qonuni. "Kadrlar tayyorlash milliy dasturi" Toshkent, 1997 y. "Sharq" –63 b.
2. Spravka po AutoCAD 2007.
3. <http://www.autodesk.com/autocad-rus>

Xalilova M.R.
“TIQXMMI” MTUning Qarshi irrigatsiya va agrotexnologiyalar instituti
“Iqtisodiyot” kafedrasida stajyor o’qituvchisi,
Fayziyeva D.B.
Toshkent Davlat Iqtisodiyot Universiteti
“Iqtisodiyot nazaryasi” kafedrasida assistent

O‘ZBEKISTON RAQAMLI IQTISODIYOTIDA SUN’IY INTELEKTNING AHAMIYATI VA SAMARADORLIGI

Annotatsiya. Sun'iy intellekt hozirgi axborot asrida nihoyatda dolzarb bo'lib, insoniyat sun'iy intellekt orqali XXI asrning global muammolariga ilmfanda yangi imkoniyatlarni kashf etish yo'li bilan ijobiy yechimlarni topdi. Shuningdek, bu tibbiyot, ta'lim, energetika, qishloq xo'jaligi, shaharsozlik va ayniqsa raqamli iqtisodiyot sohalarda sifatli xizmat ko'rsatish imkoniyatlarini oshiradi.

Kalit so'zlar: axborot-kommunikatsiya texnologiyalari, raqamli iqtisodiyot, sun'iy intellekt, istiqbolli loyihalar, global, zamonaviy axborot texnologiyalari.

Khalilova M.R.
intern teacher
Department of "Economics"
Karshi Institute of Irrigation and Agrotechnologies
MTU "TIQXMMI"
Faiziyeva D.B.
assistant
"Economic theory" department
Tashkent State University of Economics

THE IMPORTANCE AND EFFECTIVENESS OF ARTIFICIAL INTELLIGENCE IN THE DIGITAL ECONOMY OF UZBEKISTAN

Annotation. Artificial intelligence is extremely relevant in today's information age, and humanity has found positive solutions to the global problems of the 21st century by discovering new opportunities in science through artificial intelligence. It also increases the possibilities of providing quality services in the fields of medicine, education, energy, agriculture, urban planning, and especially the digital economy.

Keywords: information and communication technologies, digital economy, artificial intelligence, promising projects, global, modern information technologies.

Mamlakatimizda ham so'nggi yillarda axborot texnologiyalarini rivojlantirish, soha va tarmoqlar faoliyatiga raqamli texnologiyalarni joriy etish, "aqlli dasturlar"ning qo'llanish sohasini kengaytirish bo'yicha davlatimiz rahbari va hukumatimiz tomonidan qator huquqiy hujjatlar qabul qilindi va ijro etilmoqda. Loyihada esa bevosita sun'iy intellekti rivojlantirish uchun muhim bo'lgan hujjatlar keltirilgan. Ilm-fan va axborot-kommunikatsiya texnologiyalari jadal taraqqiy etib borayotgan bugungi sharoitda dunyoning rivojlangan mamlakatlarida davlat va jamiyat boshqaruvi, iqtisodiyot, sanoat, ijtimoiy himoya, ta'lim, tibbiyot, bandlik, qishloq ho'jaligi, mudofaa, xavfsizlik, turizm va boshqa sohalarda zamonaviy axborot texnologiyalari va sun'iy intellekt imkoniyatlaridan keng foydalanish urfga kirmoqda. O'zbekistonda ham axborotlashtirish va raqamli iqtisodiyotni rivojlantirish orqali 2030-yilga qadar innovatsion taraqqiy etgan yetakchi davlatlar qatoridan o'rin egallash ustuvor vazifa sifatida belgilangan. Qayd etish joizki, «Ilm, ma'rifat va raqamli iqtisodiyotni rivojlantirish yili»da axborot texnologiyalari va raqamlashtirish borasida jiddiy o'zgarishlar amalga oshirilib, bir qator muhim dasturlar qabul qilindi. Xususan, O'zbekiston Respublikasi Prezidentining «Raqamli iqtisodiyot va elektron hukumatni keng joriy etish chora-tadbirlari to'g'risida»gi hamda «Aholiga davlat ijtimoiy xizmatlari va yordam taqdim etish tartib-taomillarini avtomatlashtirish bo'yicha qo'shimcha chora-tadbirlar to'g'risida»gi qarorlari va boshqa normativ-huquqiy hujjatlar mamlakatimizda raqamlashtirishni jadallashtirish va ijtimoiy-iqtisodiy sohalarga zamonaviy texnologiyalarni joriy qilishga qaratilgan. Shu bilan birga, so'nggi yillarda axborotlashtirish va ilg'or texnologiyalarni turli sohalarda tadbiq etish borasida chora-tadbirlar natijasida O'zbekistonda AKT va sun'iy intellekt sohasida o'ziga xos salohiyat asoslari yaratildi. Bu borada Innovatsion rivojlanish vazirligi va vazirlik tizimidagi tashkilotlar, AKT bo'yicha ilmiy tadqiqot markazlari, oliy ta'lim muassasalari va ularning iqtidorli bitiruvchilari hamda texnoparklar, xususiy sektordagi bir qator tashkilotlar faoliyatini alohida e'tirof etish mumkin. Shuningdek, sun'iy intellekt va zamonaviy axborot texnologiyalari yo'nalishida Farg'ona shahridagi maktablarda «Aqlli maktab» dasturi, Andijon viloyatida «Monterra» ekin maydonlarining holatini baholovchi onlayn platforma joriy etilgan bo'lsa, Toshkent viloyatining Nurafshon shahrida «Aqlli shahar», Toshkent shahrida esa «Xavfsiz shahar» va «Raqamli Toshkent» loyihalarini amalga oshirish rejalashtirilgan.

Ma'lumki, zamonaviy sun'iy intellekt turli amallarni bajarishga mo'ljallangan algoritm va dasturiy tizimlardan iborat bo'lib, inson ongi bajarishi mumkin bo'lgan bir qancha vazifalarni axborot bazasiga kiritilgan ma'lumotlar asosida amalga oshiradi. Shuningdek, sun'iy intellekt murakkab tahlillar va katta ma'lumotlar bilan ishlovchi dasturlarni o'z ichiga olib, mantiqli izchil mulohaza qilish hamda tavsiya berish qobiliyatiga ega «aqlli» texnologiya hisoblanadi. Mutaxassislar tomonidan sun'iy intellektga to'rtinchi sanoat inqilobining asosi sifatida qaralmoqda. Mutaxassislar fikricha, aholini ijtimoiy ximoya qilishning

asosini ijtimoiy yordam, ijtimoiy sug'urta va bandlik bilan bog'lik dasturlar tashkil qiladi. Rivojlangan mamlakatlarda ijtimoiy sohada, xususan, sog'liqni saqlash, ta'lim, bandlik, ijtimoiy himoya va boshqa yo'nalishlarda sun'iy intellekt va zamonaviy axborot texnologiyalari imkoniyatlaridan foydalanish keng tus olmoqda. Aholini ijtimoiy himoya qilish sohalarida rivojlanayotgan davlatlarda amalga oshirilgan muvaffaqiyatli xorijiy tajribalardan quyidagi loyihalarini ko'rib chiqish mumkin. Masalan, Janubiy Afrika Respublikasida amalga oshirilgan «Harambee» loyihasi ijtimoiy yoshlar bandligini ta'minlashga ko'maklashishga yo'naltirilgan bo'lib, ushbu dastur sun'iy intellekt yordamida kasbiy-malakaviy moslikni aniqlab, ish izlovchilar bazasini shakllantiradi va ularga turli me'yorlarga asosan tegishli mos bo'sh ish o'rnini taklif qiladi. «Harambee» qisqa davr ichida asosan xususiy va norasmiy sektorda yoshlarni ish bilan ta'minlagan. Sun'iy intellekt asosida ishlovchi kasbiy-malakaviy moslik bo'yicha dasturning O'zbekiston sharoitida qo'llanilishi norasmiy sektorda band bo'lgan, ayniqsa, bir martalik ish bozorlaridagi ish qidiruvchilarning bandligini ta'minlashga va ularni ijtimoiy himoya bilan qamrab olishga imkon beradi. Dastlabki bosqichda sun'iy intellekt texnologiyalarini mobil qurilmalardan foydalanish mumkin bo'lgan dasturlar orqali taklif qilib, norasmiy sektordagilarni kunlik va mavsumiy ishlarga jalb qilish, ularning bandligini ta'minlash mumkin. Sun'iy intellektga asoslangan loyihalarni O'zbekiston sharoitida mavjud dasturlar va davlat idoralariidagi ma'lumotlar bazasini integratsiyalashtirish va kengaytirish orqali bir qator istiqbolli loyihalarni ko'rib chiqish mumkin.

Ta'kidlash lozimki, sun'iy intellekt asosini ma'lumotlar bazasi tashkil etib, ularning manbasi turlicha bo'lishi mumkin. Ma'lumotlar bazasini esa muntazam to'ldirish va kengaytirish sun'iy intellekt tahliliy imkoniyatlarini va samaradorligini oshiradi. O'zbekistonda hozirda mavjud ma'lumotlar manbalaridan sun'iy intellekt ma'lumotlar bazasini shakllantirish va ulardan samarali foydalanish mumkin. Jumladan:

Identifikatsiyalash yagona tizimi – (id.gov.uz);

O'zbekiston Respublikasi ochiq ma'lumotlar portali – (data.gov.uz);

Elektron hukumat tizimi ma'lumotlar bazasi – (my.gov.uz);

Davlat xizmatlari agentligi ma'lumotlar bazasi – (davxizmat.uz);

turli vazirlik va idoralarning ma'lumotlar bazasi.

Shuningdek, jahon tajribasida ijtimoiy sohaga yo'naltirilgan dasturlarda sun'iy intellekt ma'lumotlar bazasini shakllantirishda milliy ID tizimlari ma'lumotlari, aholini ro'yxatga olish va soliq to'lovchilar bazasi, tibbiyot, bank, sug'urta kompaniyalari, do'kon va bozorlar xaridorlari, mobil aloqa operatorlari ma'lumotlari hamda aholining kommunal to'lovlar va qarzdorlik, kredit tarixi, ijtimoiy tarmoqlardagi faolligi kabi manbalardan qonun doirasida foydalaniladi. Qayd etish joizki, sun'iy intellektni ijtimoiy va boshqa sohalarga joriy qilishda shaxsga doir ma'lumotlar daxlsizligi, ularni saqlash va boshqarish muhim ahamiyatga ega. Chunki, sun'iy intellektidan foydalanishning axloqiy jihatlari, ayniqsa, AQSh, Buyuk Britaniya, Yevropa Ittifoqiga a'zo davlatlar va yetakchi

xalqaro tashkilotlar diqqat markazida bo'lib, inson huquqlari va shaxsiy ma'lumotlar masalasi hamda sun'iy intellektdan siyosiy va buzg'unchi maqsadlarda foydalanish xavfi dolzarb hisoblanadi. Ayrim davlatlar, xususan, Xitoy va Rossiyada sun'iy intellekt va AKTdan fuqarolar shaxsiy huquq va erkinliklarini cheklash va siyosiy maqsadlarida foydalanilmoqda, degan ayblovlar yangramoqda. Shuning uchun sun'iy intellektdan foydalanishning huquqiy asoslarini yaratishda bu masalalarga ham alohida e'tibo qaratilishi maqsadga muvofiq. Shuningdek, sun'iy intellekt va AKTni joriy qilishda shaxsga doir ma'lumotlar va shaxsiy hayotga oid huquqlar hamda ulardan milliy xavfsizlikni ta'minlash yo'lida foydalanishda muvozanatni saqlash muhim ahamiyatga ega.

Xulosa o'rnida qayd etish mumkinki, mamlakatimizda sun'iy intellekt imkoniyatlari va texnologiyalarini ijtimoiy himoya dasturlarida qo'llash imkoniyatlari va zarurati mavjud bo'lib, tegishli dasturlash yo'nalishlaridagi yetakchi mahalliy mutaxassislar va xorijiy kompaniyalarni jalb qilgan holda sun'iy intellekt texnologiyalarini joriy qilish va mamlakatimizda raqamli iqtisodiyot sohasida keng qo'llash maqsadga muvofiq. Chunki hozirgi davr bevosita har bir sohada raqamlashtirishni ya'ni har bir sohada raqamli texnologiyalardan foydalanishni talab qiladi.

Foydalanilgan adabiyotlar:

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3. Ловчикова Е.А., Первых Н.А., Солодовник А.И. (2017). Цифровая экономика и кадровый потенциал АПК: стратегическая взаимосвязь и перспективы.
4. https://uz.wikipedia.org/wiki/Sun%CA%BCiy_intellekt
5. <https://uz.goodinternet.org/uz/sections/osmirlar/qiziqarli-faktlar/suniy-intellekt-nima/>

*Xamidova D.M.
Tadqiqotchi - o'qituvchi
O'zDJTU*

INGLIZ BA O'ZBEK TILLARIDAGI IQTISODIY TERMINLARDA MA'NO KENGAYISHI VA TORAYISHI

Annotatsiya. Mazkur maqola ingliz va o'zbek tillari iqtisodiy terminlaning leksik-semantik jihatdan olib borilgan qiyosiy tahlil natijalarini yoritib, soha terminologiyasida ma'no Kengayishi va ma'no torayishi hodisalari bilan tanishtirib o'tadi. Maqoladan ko'zda tutilgan maqsad maxsus lug'at tizimida leksik modifikatsiyalarning yuzaga kelish sabablari, shart-sharoitlarini aniq misollarda asoslab berishdan iborat. Shuningdek, ushbu tadqiqot ishi har ikki til terminosistemasida, xususan, iqtisodiyot terminlarida ma'no bo'yoqdorligining ifodalanish darajasini aniqlash, kengayishi va torayishi holatlarining tadqiq etish vazifalarini qo'yadi

Kalit so'zlar: termin, terminologiya, iqtisodiy terminlar, ma'no kengayishi, ma'no torayishi, leksik-semantik munosabat.

*Khamidova D.M.
researcher – teacher
UzSWLU*

ENGLISH AND UZBEK ECONOMIC TERMS' EXPANSION AND NARROWANCE IN MEANING

Abstract. This article discusses the the results of a lexical-semantic analysis of English and Uzbek economic terms and introduces the phenomena of expansion and narrowing of meaning of economic terms. The purpose of the article is to justify the causes and conditions of the occurrence of lexical modifications in the system of special vocabulary with particular examples. Moreover, the research work sets the tasks of determining the level of expression of meanings in the terminological systems of the both languages, in particular, economic terms researching their expansion and narrowing in meaning.

Key words: term, terminology, economic terms, expansion of meaning, narrowing of meaning, lexical relationship, semantic relationship.

Har bir tilda vaqt o'tishi bilan qadimdan ma'lum bo'lgan ko'plab so'zlarda sezilarli o'zgarishlar yuz beradi. Lug'aviy birliklarning ma'no jihatdan o'zgarishi yangi voqelikni nomlash bilan bir qatorda tilning so'z boyligini kengaytirish va boyitishga yordam beradi. Lug'aviy birlikning yangi ma'no kasb etishi yangi so'z vujudga kelishiga olib keladi va bu bilan lingvistik semantika mustahkamlanadi.

Soʻzlar maʼno-mazmunida roʻyberadigan har qanday oʻzgarish uning etimologik ildizi bilan aloqani qaysidir jihatdan bogʻlab turadi.

Shu oʻrinda Y.A.Zemskayaning yangi soʻzni oʻzaro semantik aloqalarni eʼtiborga olmay yasalishi borasidagi fikrini keltirib oʻtishni lozim deb hisoblaymiz: "... U holda tilni egallash juda qiyin bir ahvolga kelib qolar yoki buning umuman imkoni ham boʻlmas edi. Lugʻat tarkibini kengaytirish yoʻsini undan foydalanishni yanada qulaylashtirish, eng asosiysi, tildagi mavjud oʻzaro bogʻlangan soʻzlar orqali real hayotdagi oʻzaro bogʻlangan voqea-hodisalarni ifodalashdan iboratdir. Demak, soʻzlarning tildagi oʻzaro aloqasi real predmet va mavjud voqea-hodisalar oʻrtasidagi oʻzaro aloqalarni aks ettiradi"[, Земская, 1963;11].

Lugʻatdagi har qanday maʼnoviy oʻzgarishlar yangi voqelik ifodasi bilan birga soʻz boyligini kengaytirish yordam beradi. Soʻzning yana bir yangi maʼnoga ega boʻlishi yangi soʻzning tugʻilishiga olib keladi.

Tilda yuz berayotgan innovatsiya jarayoni borasida M.V.Marchuk fikricha, "...jamiyatning maʼlum bir kollektiv lingvistik xotirasi mavjud boʻlib, u davr sinovidan oʻtgan soʻzlarni oʻz ichiga oladi. Tildagi innovatsiyalar tez-tez sodir boʻladi, ammo ularning konsolidatsiyasi har doim ham sodir boʻlmaydi" [Marchuk, 1996]. Aytish mumkinki, bu holat yetarlicha oʻrganilmagan.

Ingliz va oʻzbek tillaridagi iqtisod terminlarining leksik- semantik tahlili boʻyicha amalga oshirilgan tadqiqotlar, koʻrib chiqilgan misollarga tayangan holda, ularning oʻzaro munosabatlari, terminlashuv jarayonlarini quyidagi transit usullarga koʻra tahlil qilamiz:

- 1) soʻzlarning maʼno kengayishi orqali terminlashuvi;
- 2) soʻzlarning maʼno toryishi natijasida terminlashuvi;

Til terminologik qatlamining shakllanishi va rivojlanish jarayoni oʻziga xos yangi soʻz yasaliş strategiyalari til lugʻat boyligiga asoslangan holda sodirboʻladi. Umumisteʼmoldagi soʻzlarning terminlashuvi tarixiy jarayonlar bilan bogʻliq holda amalga oshadi. Bu jarayondan koʻrish mumkinki, tildagi umumadabiy soʻzlar va terminlar orasida oʻzaro uzviylik mavjud: "Terminologiyaning shakllanishi va taraqqiy etish jarayoni umumadabiy leksika va terminologik leksika oʻrtasidagi jips aloqalarda yaqqol namoyon boʻladi" [Dadaboyev, 2022; 31]. Mazkur aloqalarni yuqorida eʼtirof etilgan tasnif boʻyicha tahlil qilishni lozim topdik.

Soʻzlarning maʼno kengayishi natijasida terminlashuvi

Soʻnggi yillardagi ijtimoiy-siyosiy jarayonlar jiddiy oʻzgarishlar sodir boʻlishiga ham olib keldi. Ijtimoiy munosabatlarning yangi shakllari turli semantik oʻzgarishlarda eng faol tarzda namoyon boʻldi. Ijtimoiy tarmoqlar bu borada, ayniqsa, faol taʼsir qildi. Aynan shu yerda yangicha dunyoqarash aks etdi. Birinchidan, neytral, koʻpincha oʻziga xos soʻzlar guruhida siyosiy lashuv bilan bir vaqtning oʻzida maʼnoning kengayishi mavjud. Masalan, *economic drivers* – *iqtisodiyot drayverlari*, *investing attractiveness* – *investitsion jozibadorlik*, *development* – *taraqqiyot*, *prize* – *yutuq* kabi soʻzlar yangi kontekstga kirib,

ijtimoiy-siyosiy ahamiyatga ega bo'ldi. *Openness – oshkoralik, green economy – yashil iqtisod* so'zida siyosiy-iqtisodiy termin sifatida nominal xarakter kuchaydi. Yangi ma'no butun bir so'z uyasini shakllantirish uchun turtki bo'lib xizmat qildi.

Ma'noning o'ziga xos kengayishi huquqiy, ijtimoiy-siyosiy tushunchalarni bildiruvchi so'zlarda ham uchraydi. Bular tilda qadimdan ma'lum bo'lgan *private property – xususiy mulk, entrepreneur – tadbirkor, yakka tadbirkor, financier – sarmoyador, founder – ta'asischi, stock-holder – aksiyador* kabi so'zlar bo'lib, ular juda tor ma'noga ega edi. Bu esa, so'zlardan aniq kontekstga ega bo'lishi, doimiy ta'riflarga ega bo'lishini talab qilgan. Bunday ta'riflar so'zlarning ma'nolari torayishi, ularning tor soha so'zi sifatida xoslanishiga olib keldi va so'zlarning ma'nolarining universal darajasiga chiqishiga imkon bermadi.

Ingliz tilida umumiste'moldagi so'zlarda ma'noning kengayishi natijasida iqtisod sohasiga oid ko'plab terminlar hosil bo'lgan, ulardan bir nechtasini ko'rib chiqamiz:

Budget – *budjet, mablag'*, ingliz tiliga XV asr boshlarida kirib kelgan bu termin qadimgi fransuz tilida “*bougette*” – charm sumka, hamyon ma'nosidagi “*bouge*”ning kichraytirish-erkalash shakli bo'lgan. Fransuz tiliga lotin tilidan o'zlashgan: *bulga* – charm sumka. Zamonaviy termin sifatida “ehtimoliy daromadlar va harajatlar” degan kinoyali ma'nosi 1733 yildan boshlab, Angliya moliya vazirining davlat moliyaviy rejalarini hamyonida saqlashi tushunchasidan kelib chiqqan [Wedgwood, 1859;287].

Broker – broker, qadimgi vino savdosi bilan bog'liq bo'lgan bu termin, dastlab “vino bochkasi”(a cask) ma'nosida, keyinroq, “vino bochkasini tashimoq, ko'tarmoq, vino hajmini o'lchamoq” (broach a cask) [Wedgwood, 1859; 140] ma'nosida, keyinroq esa “chakana vino sotuvchisi” ma'nosida qo'llangan. Shu paytdan boshlab har qanday “chakana savdogar”, “vositachi”, “dallol” ma'nosini anglatgan. Ularning kichik xaridlar qilishi ba'zan two-dollar broker, a dollar broker tarzida ham ifodalangan. O'sha davrni yoritgan Teodor Drayzerning “Sarmoyador”asarida quyidagicha ifodani uchratish mumkin: “*These men who were known to be minor partners and floor assistants were derisively called "eighth chasers" and "two-dollar brokers", because they were always seeking small orders...*” [Dreiser, 1912; p-74]. (“Mayda sheriklar va mahalliy yordamchilar sifatida tanilgan bu kishilarni istehzo bilan "sakkizinchi izquvarlar" hamda "ikki dollarlik brokerlar" deb atashardi, sababi ular doim mayda buyurtmalar izlashardi...”). Keyinchalik “broker” terminidagi dastlab nazarda tutilgan xarid miqdori o'z ahamiyatini yo'qotib, ma'no yanada kengaydi: broker – o'rtada turib vositachilik qiluvchi dallol, makler (Tovar, valyuta, savdo birjalarida oldi-sotdi bitimlari tuzishda vositach(dallol)lik qiladigan ayrim shaxs yoki firma [O'TIL, B 228].

Dicker – 1802-yildan boshlab, “*savdolashmoq*”, “*chiroyli tarzda savdo qilmoq*”[Harper, 2001 – 2024] ma'nosida qo'llana boshlagan bu termin mo'yna savdosi bilan shugullanuvchi qadimgi German va Rim savdogarlari tilida “*o'nta mo'yna o'rami*” ma'nosini beruvchi so'zdan kelib chiqqan [Ayers, 1986; 253]. U

paytlarda mo'ynaning bir o'ramda o'ntadan qadoqlanishi *decurlae* (*qad. lot. desim*) tarzida ma'lum bo'lgan. German tilida *decher va dan* tilidagi *deger* – o'n, o'ninchi o'ntalik qadoq ma'nosini bergan.

O'zbek tilida ham terminlarda ma'no kengayishi kuzatiladi, masalan yunon tilidan o'zlashgan *pul* so'zi dastlab, chaqa ma'nosidagina ishlatilgan, ba'zi joylarda yarim tiyinga, ba'zi joylarda bir tiyinga teng bo'lgan pul o'lchov birligi va shu qiymatdagi mayda pulning o'zini ifodalagan, hozir bu arxaik ma'no hisoblanadi, shuningdek, fors tilidan baliq tangasi ma'nosi ham o'zlashgan. Keyinroq ma'no doirasi kengayib, 1. Oldi-sotdi yoki to'lov muomalarida narx, baho, qiymato'lchovi bo'lgan metal yoki qog'oz belgi; 2. Sarmoya, mablag'; 3. Ish haqi, maosh. [O'TIL, P, 124]. Shu o'rinda *tanga* so'zidagi ma'no kengayishiga ham to'xtalib o'tsak, dastlab qadimda buxoro xonligida 15 tiyinga, Qo'qon xonligida 20 tiyinga teng bo'lgan kumushpul [O'TIL, T; 321]ni ifodalagan bu termin, keyinchalik, qo'g'oz puldan tashqari oltin, kumush, mis kabilardan zarb etilgan pul birliklarini ham qamrab oldi. O'tgan asrning ikkinchi yarmidan tiyin pul birligining zarb qilingan metal birliklaridan tashqari turli avtomatik qurilmalar uchun ishlab chiqilgan, xalq tilida "jeton" deb ataluvchi dumaloq, yassi metal yoki plastik vositalar ham shunday atala boshlandi.

Misollardan ko'rinib turibdiki, iqtisodiyot sohasiga oid maxsus tushunchalarni ifodalovchi maxsus terminologik qatlamning tashkil topishi va taraqqiy etishida ijtimoiy-siyosiy va savdo aloqalarining ma'lum darajada muayyan leksik-semantik qamrovning kengayishi yoki quyida tahlil qilinadigan semantik torayishiga hissasi katta.

So'zlarning ma'no torayishi natijasida terminlashuvi. Ingliz va o'zbek tili iqtisodiy terminologiyasining yana bir xarakterli xususiyati shundaki, birikmali terminlar ma'anoni aniqlashi va to'liqroq ifodalashiga ko'ra sodda terminlardan ustundir. Ma'noda torayish yuz bergani sari hodisa mohiyati torroq, aniqroq ifodalanadi. Quyidagi misollarda so'z + termin ko'rinishida so'zlarning birikma tarkibida terminlashuvini kuzatish mumkin, bunday birikish usuli terminlarning barqarorlik xususiyatini ta'minlaydi: *venture* – tashabbus (so'z), *business venture* – biznes tashabbusi (termin); *affair* – yumush, ish (so'z), *business affairs* – biznes ishlari (termin); *relations* – aloqalar (so'z), *business relations* – biznes aloqalar (termin); *opportunity* – imkoniyat (so'z), *business opportunities* – biznesdagi imkoniyatlar (termin);

Shu o'rinda ta'kidlash joizki, bu kabi birikmalar tarkibidagi adabiy tilga tegishli so'zlar o'zaro erkin o'rin almashish xususiyatiga ega: *business relations* – biznes aloqalar = *economic relations* – iqtisodiy aloqalar = *financial relations* – moliyaviy aloqalar;

Termin + termin birikuvidan ham ma'no torayishini kuzatish mumkin: *financial crisis* – moliyaviy inqiroz, *financial enterprise* – moliyaviy korxonalar, *financial investment* – moliyaviy investitsiyalar, *fair trade* – adolatli savdo, *market price* – bozor narxi, *stock-market quotations* – birjada belgilangan narx.

Terminlar semantikasidagi o'zgarishlar umumiylikdan xususiylikka tomon yuz berganda ma'no torayishi, xususiylikdan umumiylikka tomon yuz berganda esa ma'no kengayishi yuz beradi. Xullas, davrlar o'tishi bilan ayrim terminlar hodisaning ma'nosini yanada aniq ifodalash zarurati bilan ma'no torayishiga uchradi. Masalan, *treasury – g'azna, cashier – hisobchi, poverty – kambag'allik, investition attractiveness – investitsion jozibadorlik, economic growth – iqtisodiy o'sish, break – sinish, demand – talab, lackness – taqchillik* kabi. Ma'noda torayish yuz bergan sari hodisa mohiyati torroq, aniqroq ifodalanadi.

Fan-texnika rivojlana borgani sari, parallel ravishda, aynan shu taraqqiy etib borayotgan sohalarga tegishli terminologik tizim ham o'ziga xos tarzda boyib, rivojlanib bormoqda. Har bir fan tarmog'i qachon paydo bo'lgani, qanday rivojlanish bosqichlarini boshdan kechirgani, o'z rivojlanish yo'lining qanday darajasida ekaniga, kuzatilayotgan yangiliklar, islohotlar va qilinayotgan ixtirolar va kashfiyotlar ko'lami orqali soha terminosistemi hajmini baholash mumkin.

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*Xasanov X.M.
Qo'qon davlat pedagogika instituti,
"Informatika" kafedrasida o'qituvchisi*

RAQAMLI TEXNOLOGIYALARNING TA'LIM JARAYONIDAGI AHAMIYATI

Annotatsiya. Maqolada raqamli texnologiyalari va ularning ta'lim jarayonidagi ahamiyati yoritilgan. Darsni raqamli texnologiyalari va kompyuter ko'magidan foydalanib tashkil etilganda, talabalar va o'qituvchilar uchun eng samarali, mos va qiziqarli bo'lishi uchun rejalashtirish mumkin hamda bilish faoliyatini tashkil etishning eng ko'p tarqalgan shakllari individual va frontal ta'lim shakllarining har ikkalasidan bir vaqtda foydalanish mumkinligi yoritilgan.

Kalit so'zlar: Raqamli texnologiyalari, kompyuter, axborot texnologiyalari, elektron ta'lim texnologiyalari, multimedia, axborot, dastur.

*Xasanov X.M.
teacher
"Informatics" department
Kokand State Pedagogical Institute*

THE IMPORTANCE OF DIGITAL TECHNOLOGIES IN THE EDUCATIONAL PROCESS

Annotation. The article describes digital technologies and their importance in the educational process. When the lesson is organized using digital technologies and computer support, it can be planned to be the most effective, relevant and interesting for students and teachers, and the most common forms of organizing cognitive activities are both individual and face-to-face learning forms. simultaneous use is highlighted.

Keywords: Digital technologies, computer, information technologies, electronic education technologies, multimedia, information, program.

Kirish. Bugungi kunda raqamli texnologiyalaridan o'quv jarayonining turli bosqichlarida foydalanish zamon talabi hisoblanadi. Jumladan, prezidentimiz Shavkat Mirziyoyevning "Pedagogik ta'lim sohasini yanada rivojlantirish chora-tadbirlari to'g'risida"gi 2020-yil 27-fevraldagi PQ-4623-sonli qarorida, oliy pedagogik ta'limga raqamli texnologiyalarni joriy etish, zamonaviy axborot-kommunikatsiya va ta'lim texnologiyalarining mustahkam integratsiyasini ta'minlash pirovardida pedagog kadrlarning kasbiy mahoratini uzluksiz rivojlantirib borish, tarbiya va o'qitish usullari, axborot-kommunikatsiya texnologiyalari hamda xorijiy tillarni puxta o'zlashtirgan, ta'lim jarayonida

zamonaviy pedagogik texnologiyalarni qo'llash ko'nikmalariga ega professional pedagog kadrlar tayyorlash hamda pedagogik ta'lim sohasining ta'lim yo'nalishlari va mutaxassisliklari bo'yicha o'quv reja va dasturlarini ilg'or xorijiy tajribasi asosida takomillashtirish, innovatsion o'quv-me'yoriy va ta'lim texnologiyalarini yaratish hamda amaliyotga joriy etish ustuvor vazifa qilib belgilangan[1]. Bundan ko'rinadiki, raqamli texnologiyalarini uzluksiz ta'lim tizimiga qo'llashning yangicha yondashuvlarini joriy etish hamda amaliyotga qo'llash muhim ahamiyat kasb etadi.

Materiallar va uslublar. Bugungi kunda deyarli barcha ta'lim muassasalari kompyuterlar va elektron ta'lim texnologiyalari to'plamiga ega hamda o'quv jarayonini takomillashtirish uchun raqamli ta'lim texnologiyalari paydo bo'lmoqda.

O'quv jarayoniga raqamli ta'lim texnologiyalarini joriy etish o'quv-tarbiya jarayonining yangi usullarini qo'llash, o'qituvchining pedagogik malakasini oshirishga olib keladi.

Raqamli ta'lim texnologiyasi o'quv jarayonida foydalanish uchun qo'llaniladigan raqamli shakldagi ma'lumotlar to'plami[3]. Elektron qurilmalarda namoyish etish, foydalanish uchun ishlatiladigan o'quv materiallari - elektron ta'lim texnologiyalari (ETR) deb ataladi. Eng umumiy holatda, ETR o'quv videofilmlari va yozuvlar, ularni ijro etish uchun yetarli uy yozuvchisi yoki CD-pleerlarni o'z ichiga oladi. Ta'lim uchun eng zamonaviy va samarali ETR kompyuterda namoyish etiladi. Ba'zan, bu kichik ETR to'plamini ta'riflash uchun ular - raqamli ta'lim texnologiyalari (RTT) deb ataladi, bu esa kompyuterning raqamli ro'yxatga olish usullarini qo'llashini anglatadi.

Dinamik ravishda rivojlanib borayotgan axborot texnologiyalari ko'plab o'qituvchilar o'zlarining uslubiy tizimiga tobora ko'proq tayyor bo'lgan ta'lim jarayoni uchun an'anaviy vositalarni samarali ravishda to'ldiradi. Raqamli ta'lim texnologiyalaridan foydalanish o'quv jarayonining samaradorligini oshirish uchun yangi imkoniyatlar beradi. RTT-o'quv jarayonida tezkorlik vositasi, talabalarning amaliy ko'nikmalarini ishlab chiqish, so'rov va nazoratni tashkil etish hamda o'tkazish, shuningdek, uy vazifalarini nazorat qilish va baholash, chizmalar, jadvallar, grafikalar bilan ishlashda yordamchi vazifasini bajaradi. Dasturlashtirilgan ta'limning o'ziga xos xususiyati talabalarning mustaqil faoliyatini bosqichma-bosqichligi bo'lib, bu o'quv jarayonini faollashtirishga yordam beradi, shuningdek, ta'limni shaxsiylashtirish va farqlash mumkin bo'lgan tezkor qayta aloqa mavjudligi.

Asosiy ta'lim ta'siri va boshqaruvi kompyuterga uzatilganda o'qitishda o'qituvchi talabalarning fazilatlarini namoyon qilish, masalan, qidiruv maqsadini tushunish, ilgari o'rganilgan bilimlarni faol takrorlash, tayyor manbalardan yetishmayotgan bilimlarni to'ldirishga qiziqish, mustaqil qidirish kabi imkoniyatlarga ega bo'ladi. Bu o'qituvchiga o'z boshqaruv faoliyatini loyihalashtirish va talabalarning ta'limga bo'lgan ijodiy munosabatini bosqichma-bosqich rivojlantirish imkonini beradi. O'quv mashg'ulotlarini (o'quv

topshiriqlari yoki kompyuter dasturlari orqali) tekshirish uchun standartlarni taqdim etish, xatolar sabablarini tahlil qilishda talabalarni har bir darsda foydalanilishi kerak bo'lgan o'z-o'zini nazorat qilish va o'quv-ma'rifiy faoliyatni, o'z-o'zini tarbiyalash uchun asta-sekin o'zlashtirishga imkon beradi.

Raqamli ta'lim texnologiyalari zamonaviy ta'limning maqsadlari va vazifalarini amalga oshirishga qaratilgan grafik, matn, raqamli, nutq, musiqa, video, foto va boshqa ma'lumotlarni o'z ichiga olgan axborot manbai hisoblanadi[2].

Raqamli ta'lim texnologiyalaridan foydalanishning quyidagi asosiy pedagogik maqsadlari aniqlanishi mumkin:

–zamonaviy axborot texnologiyalari vositalarini qo'llash orqali o'quv-tarbiya jarayonining barcha darajalarini jadallashtirish;

–ta'lim oluvchining shaxsini rivojlantirish, shaxsni axborot jamiyati sharoitida zamonaviy, axborotlashgan hayotga tayyorlash.

Raqamli ta'lim texnologiyalarini boshqa ta'lim vositalaridan ajratib turadigan sifat ko'rsatkichlarini ikki qismga ajratish mumkin: multimedia va interaktivlik.

Multimedia-bir xil media manbasida turli xil axborot formatlarini taqdim etish. Bunday formatlar matn, ovoz, foto va video tasvir bo'lishi mumkin.

Interaktivlik-ushbu tizimning elementlarini axborot almashinuvi orqali erishilgan tizimni tashkil etish tamoyilidir.

Dasturlashtirilgan RTT "stimul-reaktsiya" tizimi bo'yicha ta'lim tizimining talablariga javob beradi. Bunday resurslar talabaniq mustaqil ishiga qaratilgan, bilim olish asoslari va usullarini, ularning kasbiy mahoratga bo'lgan munosabatlarini ochib beradi. Bunday resurslarning o'ziga xos xususiyatlari: o'rganilayotgan ob'yektlar yoki jarayonlarning matematik modellarini va talabalarni boshqariladigan tadqiqot rejimida o'quv muammolarini hal qilishda qo'llab-quvvatlaydigan maxsus interfeysdan foydalanish; jarayonlar modellari; tabiiy hodisalar modellari; laboratoriya ishlari modellari; tajriba modellari; interaktiv amaliy vazifalar.

Muammoli RTT muammoli ta'limni amalga oshirishda foydalaniladi va talabalarda mantiqiy fikrlashni rivojlantirishga, bilimlarni idrok etishning ijodiy tarkibiy qismini rag'batlantirishga qaratilgan.

Raqamli ta'lim texnologiyalari foydalanishda ta'lim jarayonining yuqori interaktivligi va multimediyasini ta'minlash, mustaqil, guruhli, individual va tabaqalashtirilgan ish turlaridan foydalanish imkoniyati paydo bo'ldi.

Xulosa. Shuni aytish mumkinki, darslarda raqamli ta'lim texnologiyalaridan foydalanish davr talabidir. Bugungi kunga kelib, darsni kompyuter ko'magidan foydalanib tashkil etilganda, talabalar va o'qituvchilar uchun eng samarali, mos va qiziqarli bo'lishi uchun rejalashtirish mumkin.

Bu kabi o'qitish vositalari kompleksidan foydalanilgan holda talabaga ta'sir ko'rsatish birgina axborot kanallari orqali amalga oshiriladi. Bu esa ta'lim samaradorligini oshiradi. Ta'lim jarayonida axborot-kommunikatsiya

texnologiyalaridan foydalanilganda, talabalarning bilish faoliyatini tashkil etish shakllarini tiklash muammosi yangicha hal etilishi lozim. Agar, an'anaviy ta'lim sharoitida bilish faoliyatini tashkil etishning eng ko'p tarqalgan shakllari individual va frontal shakllar bo'ladigan bo'lsa, axborot-kommunikatsiya texnologiyalaridan foydalangan holda ularning har ikkalasidan bir vaqtda foydalanish mumkin.

Ta'lim jarayoniga RTTning joriy etilishi pedagog vazifasining o'zgarishiga olib keladi, ya'ni pedagog ta'lim-tarbiya berishdan ko'ra ko'proq tadqiqotchi, tashkilotchi, maslahatchi va dasturlovchiga aylana boradi.

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*Xaytbayev E.B.
Jizzax Politexnika instituti assistenti
Dinakaran S.
Sambhram, B.tech fakulteti o'qituvchisi
Urazaliev A.
O'qituvchi Sh.Rashidov tuman 2-son KHM*

JIZZAX SHAHAR MARKAZIY KO'CHALARI KESISHGAN CHORRAHASINING MAVJUD HOLATINI TAHLIL QILISH

Annotatsiya. Ushbu maqolada Jizzax shahridagi ma'lum chorrahadagi holat tahlil qilindi va yo'l sharoitlarini yaxshilash bo'yicha bir nechta chora tadbirlar haqida xulosalar bayon qilingan.

Kalit so'zlar. Harakat sharoiti, ko'rsatgichlar, yo'l transport hodisalari, chorrahalar, yo'l kengligi, o'tkazuvchanlik.

*Khaitbayev E.B.
assistant
Jizzakh Polytechnic Institute
Dinakaran S.
Sambhram
lecturer
Faculty of B.tech
Urazaliev A.
teacher
Sh. Rashidov District No. 2 KHM*

ANALYSIS OF THE CURRENT SITUATION OF THE INTERSECTION OF THE CENTRAL STREETS OF JIZZAH CITY

Abstract. In this article, the situation at a certain intersection in the city of Jizzakh was analyzed and conclusions were drawn about several measures to improve road conditions.

Keywords: Traffic conditions, signs, road traffic incidents, intersections, road width, throughput.

Harakat sharoiti – yo'lda avtomobillar oqimi harakatlanayotganda havoiy iqlim, transport oqimi va yo'l sharoiti omillarining «avtomobil-haydovchi» tizimiga ko'rsatadigan ta'sirining umumiy bir ko'rinishida ifodalanishidir. Yo'l sharoiti deganda avvalom bor, avtomobil yo'llarining geometrik o'lchamlari va transport-foydalanish sifatlari yig'indisidan iborat ko'rsatkichlarni tushinamiz. Yo'l sharoitini tashkil qiluvchi ko'rsatkichlar ikki guruhga: doimiy va o'zgaruvchan ko'rsatkichlarga bo'linadi;

Doimiy ko'rsatkichlarga;

-yo'l qatnov qismi va cheti kengligi, harakat tasmasi soni yo'l qarshiligi, bir sathda kesishish va tutashishlar, sun'iy inshootlar va muhandislik qurilmalari;

O'zgaruvchan ko'rsatkichlarga;

-yo'l qatnov qismi va cheti holati, rejada va bo'ylamada ko'rinish, yo'l ravonligi, tishlashish sifati va qoplama g'adir budirligi, yo'l poyi va to'shamasi mustahkamligiga bog'liqdir.

Avtomobillashtirish o'zining shubhasiz ijobiy natijalarini berish bilan birga, ayrim salbiy holatlarning o'sishiga, shu jumladan yo'l-transport hodisalari sonining o'sib ketishi kuzatilmoqdaki, buning oqibatida xalq xo'jaligiga juda katta zarar etkazmoqda.

Yo'l-transport hodisasi deb – yo'lda xarakatlanayotgan loaqal bitta transport vositasi ishtirokida sodir etilib, odamlar o'limi, jarohatlanishi, transport vositasi, yo'l inshootlari, yuklarning shikastlanishi natijasida moddiy zarar keltirgan hodisalarga aytiladi.

Respublikamizda amaldagi me'yoriy hujjatlarga ko'ra yo'l-transport hodisalari quyidagi turlari mavjud:

To'qnashuv – bunga transport vositalarini qarama-qarshi tomonidan, bir yo'nalishda yoki yon tomondan xarakatlanayotgan vaqtdagi to'qnashuv kiradi.

Ag'darilib (to'ntarilib) ketish – xarakatlanayotgan transport vositasini o'z turg'unligini yo'qotib ag'darilishi.

To'xtab turgan transport vositasini urib ketish – xarakatlanayotgan transport vositasining xarakatlanmayotgan transport vositasiga urilishi.

To'siqlarga urilish – transport vositalari qo'zg'almaydigan to'siqlarga (ko'prik tayanchiga, stolba va machta tayanchiga, yo'l to'siqlariga, daraxtlarga va hokazo) urilishi.

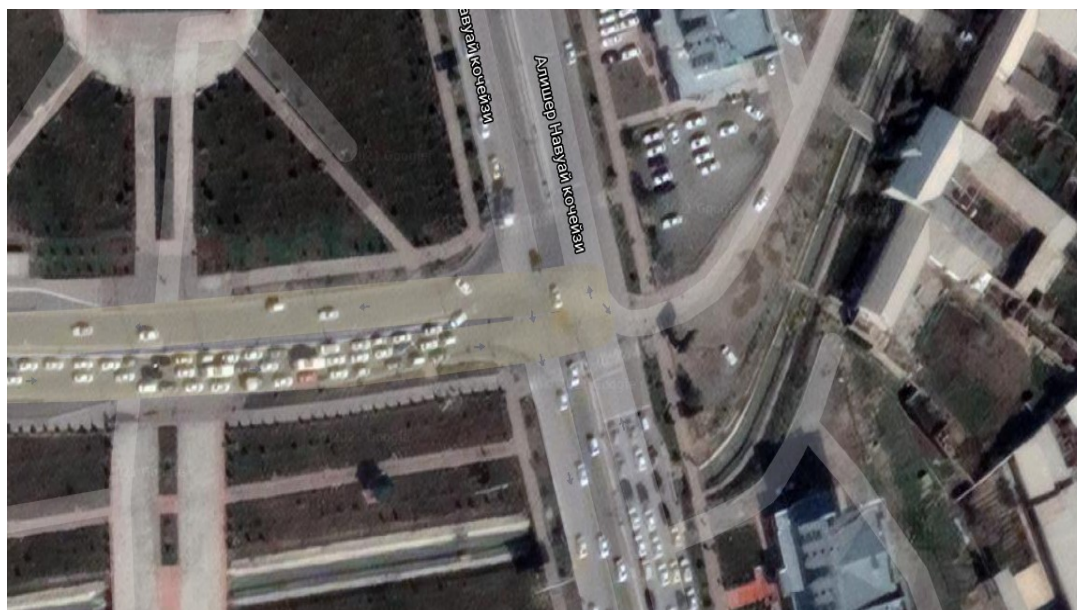
Piyodalarni bosib (urib) ketish – transport vositalari piyodalarni urishi yoki piyodalar transport vositalariga urilishi.

Velosipedchini bosib (urib) ketish – transport vositasi velosipedchini bosishi (urishi) yoki velosipedchi transport vositasiga urilishi.

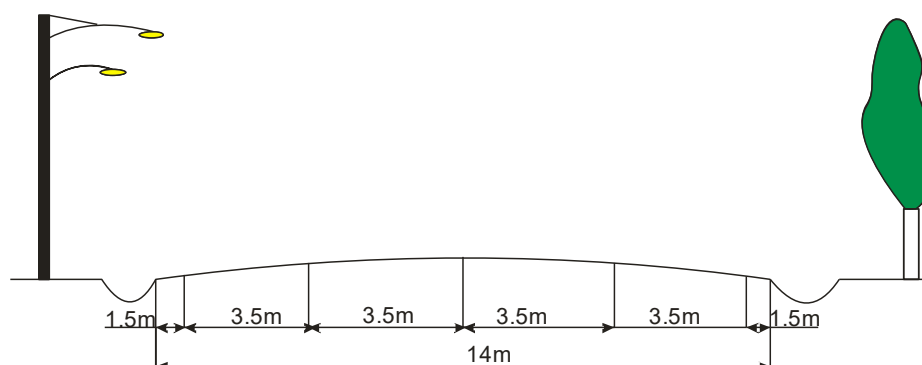
Aravani bosib (urib) ketish – xarakatlanayotgan transport vositasi xarakatlanayotgan aravani yoki aravaga qo'shilgan hayvonni urib ketishi.

Yuqoridagi yo'l transport hodisalari Jizzax shahrida qay darajada ekanligini tahlil qilish maqsadida ba'zi chorrahalarda kuzatuv ishlarini olib bordik. Shundan, A.Navoiy-O.Azimov ko'chalari chorraxasi Jizzax shahrining shimoli-sharqida joylashib muxim ahamiyatga ega chorraha bo'lib, O.Azimov ko'chasi Jizzax shaxridan A376 magistraliga chiqish uchun xizmat qilsa A.Navoiy ko'chasi (eski nomi "Xalqlar do'stligi prospekti") esa shahar markaziy ko'chalaridan biri hisoblanadi. Chorraxaning ahamiyatligining yana bir sababi bu chorraxaning bir tomonida O.Azimov ko'chasining tugash joyi hisoblanadi. Bu ko'cha shahar "Temir yo'l stansiyasiga" borish va "Ko'k bozor" bozoriga chiqish imkonini beradi.

Chorraxa O.Azimov ko'chasi tomonidan turli xildagi xizmat ko'rsatish binolari mavjud. A. Navoiy ko'chasi tomonidan esa aholi turar joylari joylashgan. Chorraxaning har tomonida manzarali daraxtlar bor.

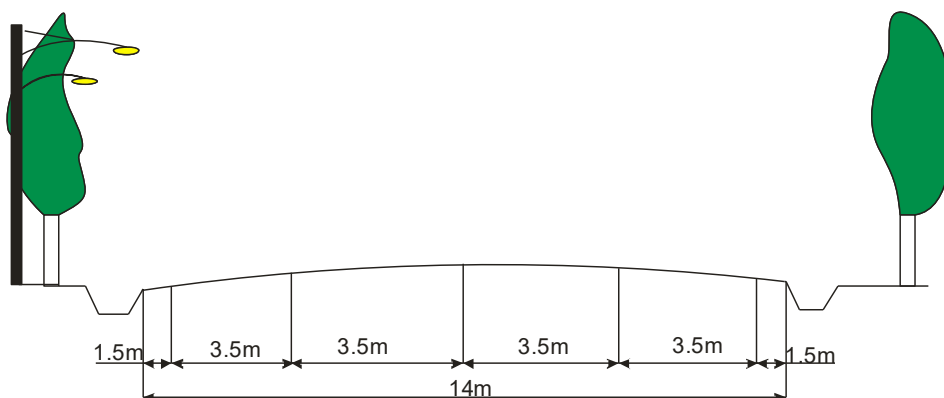


1-rasm. A. Navoiy – O.Azimov ko'chalarini chorraxasi



2-rasm. A. Navoiy ko'chasi chorraxaga tutash qismining ko'ndalang kesimi

A. Navoiy ko'chasi yo'l qoplamasi tamirlangan hech qanday chuqurliklar mavjud emas. A. Navoiy ko'chasi boshlanish qismi hisoblangan chorraxaning boshqa qismi talab darajasida emas, turli o'lchamdagi chuqurliklar mavjud va yo'l qoplamasining ahvoli qoniqarsiz. O. Azimov ko'chasining chorraxa bilan tutash qismi ham chuqurliklarga ega. A. Navoiy ko'chasi 3,5m dan 2 polasali qarama-qarshi yo'nalishlardan iborat. Yo'lning umumiy eniligi $3.5 \cdot 4 = 14\text{m}$. O. Azimov ko'chasi ham huddi shunday enilikda. A. Navoiy ko'chasining chorraxaga tutash qismi 3,5m li qarama-qarshi yo'nalishdan iborat ($3.5 \cdot 2 = 7$).



3-rasm. O. Azimov ko'chasining chorraxaga tutash qismi ko'ndalang kesimi

Chorraxaning jihozlanishi: yo'l belgi chiziqlari 1.1 (qarama-qarshi yo'nalishda harakatlanayotgan transport vositalarini ajratuvchi), 1.2 (enli sidirg'a chiziq), 1.3 (to'rt va undan ko'p harakatlanish bo'lagi bo'lagi bo'lgan qarama-qarshi yo'nalishdagi transport oqimini ajratadi), 1.5 (bir yo'nalishli va qarama-qarshi yo'nalishli transport oqimini ajratadi) 1.12 (to'xtash) 1.14.1 (zebra) ko'rinmaydi o'chib ketgan.

Chorraxa tartibga solingan chorraxa bo'lib, u svetafor va 2.1 (asosiy yo'l), 2.4 (yo'l bering) va 5.16.1 5.16.2 (piyodalar o'tish joyi) belgilari bilan jihozlangan.

Statistik malumotlarga qaraganda, uch yil davomida Jizzax shaharlarida sodir etilgan 1731 yo'l-transport hodisasi oqibatida 480 nafar odam halok bo'lgan, 1775 kishi turli tan jarohatini olgan.

Jizzax shaharlaridagi yo'l transport hodisalarini yillar bo'yicha tahlil qilganimizda, yo'l transport hodisasi soni va jarohatlanganlar soni yildan yilga o'sganligini, halok bo'lganlar esa kamayib borgan.

Umumiy yo'l-transport hodisalarining 25-35% shaharlar miqyosiga to'g'ri keladi. Sodir etilgan yo'l-transport hodisalarining 18-21% chorraxalarda, 79-82% chorraxalardan tashqarida sodir etilmoqda.

Kuzatishlar shuni ko'rsatadiki, yo'l-transport hodisalarining asosiy sababini, ya'ni har 5 ta yo'l-transport hodisasidan 3 tasi yoki umumiy yo'l-transport hodisasining turlari bo'yicha 65% piyodani bosib ketishi hamda yo'l-transport hodisasi qatnashchilari bo'yicha 31% piyodaning aybi bilan sodir bo'lmoqda.

Xulosa o'rnida yuqorida biz kuzatuv olib borgan chorraxada umumiy shahar hududida sodir bo'lgan yo'l transport hodisalarining ba'zilar sodir bo'layotganligi sababli qayta rekonstruksiya qilish, ya'ni yo'l chiziqlarini qayta chizish va ba'zi yo'l belgilarini daraxtlar ko'rinish ehtimolligini pasaytirmasligi uchun ularni qirqish va cheklangan tezlik belgilarini o'rnatishni tavsiya qilamiz.

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Xolmatova M.A.
senior teacher
Andijan State University

IMPORTANT FACTORS OF INCREASING LESSON EFFICIENCY IN TECHNOLOGICAL EDUCATION

Abstract. In the article, the use of new pedagogical technologies in educational processes, based on the tasks of the Science of Technology, gives the expected results. The use of educational technologies, which give a new spirit to the activity of the teacher and the student, gives a good result. All technologies used in the educational process have their own educational potential. Also, a methodological analysis was made about the role and importance of the teacher in the application of educational technology.

Keywords. Technology Efficiency. Problem. responsibility, social activity, communication, flexibility.

The rapid development of science, technology and other fields in our independent republic sets high tasks for public education workers, including our teachers, which requires high general training of our teachers and the effectiveness of each lesson. For example, the methodological recommendations "Continuity and continuity" on the use of educational tools in institutions of the Ministry of Public Education of the Republic of Uzbekistan states: "An effective lesson is based on general teacher training, and general training is based on the principles of continuity and succession." Improving the effectiveness of the lesson is the main direction of modern didactics and pedagogical practice. The practical nature of the modern lesson and its further formation in new conditions is to achieve the goal of not only acquiring knowledge, skills and abilities from students, but also forming the independence of their cognitive activity and increasing interest in knowledge, developing a creatively thinking, independent, free person.

One of the important conditions for improving the effectiveness of the lesson is its intensification. Intensification of education means achieving high educational productivity in a given unit of time. The intensification of the educational process means the ability to achieve high results easily and innovatively, using effective teaching methods, methods and technologies during the lesson. Intensification is a system of achieving high results through the use of science and best practices at each stage of the lesson.

The modern level of scientific, technical and social development is extremely accelerated, setting the most important tasks for the public education system.

The acceleration of socio-economic development has a strong impact on the content and essence of the public education system, leading to its further

deepening. The changes taking place in the content of education, the introduction of new directions in curricula and standards require the organization of classes at a high level based on world standards. This requires the use of active forms and methods of new learning technologies. To do this, it is necessary to intensify teaching and the educational process, which is its main link.

A means of facilitating the work of the teacher and the student and achieving maximum effect in a particular situation is to build the optimal lesson option. Optimal lesson construction means using the simplest, best and most reliable way to form the steps and methods of the lesson.

The effectiveness and optimality of the lesson also depends on its organization on a scientific basis.

In order to improve the educational process, it is also meant to create the necessary conditions for it - conditions, educational and material base, hygienic, moral and psychological climate.

Such areas of lesson improvement require the organization of pedagogical work on a scientific basis, that is, the maximum use of every moment of the lesson.

The constant increase in scientific information leads to an expansion of the content of education. This means that there may be less time to transfer information during the lesson. Well-established deductive approaches in the field of education also have a negative impact on the effectiveness of the lesson.

The above-mentioned shortcomings and defects should not be considered only as mistakes of didactics and methodologists. In the early stages of school education, sometimes in practice, a lot of space is given to extensive forms of education. And this led to a decrease in the development of the educational process.

Achieving high results through the intensification of the educational process makes it easy to achieve educational goals and objectives. Accelerating the development of science and society requires further intensification of the education system and the educational process, which is the main link of the education system responsible for the comprehensive development of young people and their upbringing in the spirit of the best traditions..

Currently, favorable opportunities have been created for the intensification of the educational process. In particular, the educational and material base of schools has been improved, scientific, methodological and professional training of teachers has increased, provision of teachers with methodological support and literature has been strengthened, special courses, trainings and seminars are being organized.

According to the generalization of advanced pedagogical experience, it is advisable to use the following methods and means of intensifying the educational process:

- to increase educational motivation;
- Increasing students ' interest in learning;
- consider learning as a duty and obligation;

to increase the purpose and effectiveness of the lesson;
effective use of active forms and methods of the lesson;
creating favorable conditions for students' educational activities;
Reliance on students' independence, creativity and initiative.

From the above it can be seen that improving the effectiveness of the lesson depends on the pedagogical skills of our respected teachers.

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*Xolmirzayev U.A.
Namangan muhandislik-qurilish instituti
iqtisodiyot fanlari bo'yicha falsafa doktori (PhD)
ORCID: 0000-0002-3589-373X
Xakimova G.A.
Namangan muhandislik-qurilish instituti talabasi*

SANOAT KORXONALARIDA INNOVATSION FAOLIYATNI BOSHQARISH TIZIMI

Annotatsiya. Sanoat korxonalarida innovatsion loyihalarni joriy etish uchun uning iqtisodiy va ijtimoiy samaradorligini baholash zarur. Shu sababli texnologik innovatsiyalarni joriy etish asosida sanoat ishlab chiqarishida yuqori samaradorlikka erishish uchun texnik chora-tadbirlarning qaysi biri foydali ekanligini aniqlash zarur.

Kalit so'zlar: Sanoat, ishlab chiqarish, innovatsion faoliyat, korxonalar, innovatsiya.

*Kholmirzayev U.A., doctor of philosophy in economics (PhD)
Namangan Institute of Engineering and Construction
ORCID: 0000-0002-3589-373X
Khakimova G.A.
student
Namangan Institute of Engineering and Construction*

INNOVATIVE ACTIVITY MANAGEMENT SYSTEM IN INDUSTRIAL ENTERPRISES

Abstract. In order to introduce innovative projects in industrial enterprises, it is necessary to evaluate its economic and social efficiency. Therefore, it is necessary to determine which of the technical measures are useful to achieve high efficiency in industrial production based on the introduction of technological innovations.

Key words: Industry, production, innovative activity, enterprises, innovation.

O'zbekistonda iqtisodiyotning yetakchi tarmoqlari, jumladan, sanoat tarmogini jadal rivojlantirishga e'tibor qaratilmoqda. 2024-yilning yanvar-fevral oylarida viloyatimizda xorijiy investitsiyalar ishtirokidagi korxonalar tomonidan 581,0 mlrd. so'mlik sanoat mahsulotlari ishlab chiqarilgan bo'lib, o'tgan yilning mos davriga nisbatan 144,2 mlrd. so'mga ko'paydi. Umumiy sanoat ishlab chiqarishdagi ulushi esa 18,7 % ni tashkil etdi.

Innovatsion rivojlanishning maqsadlari va vazifalarini aniqlashdagi xatolar innovatsion faoliyatga yo'naltirilgan moliyaviy va boshqa resurlarni natijasiz sarflashga olib kelishi mumkin. Ayniqsa, korxonaning innovatsion faoliyatga samarasiz sarflangan vaqti sanoat tarmogida fan sig'imi yuqori ishlab chiqarishni rivojlantirishning mavjud yuqori sur'atlari bilan bog'liq moliyaviy resurslar qatorida kam bo'lmagan yo'qotish hisoblanadi.

Sanoatni innovatsion rivojlanishining belgilangan yo'nalishlari doirasida loyihalar o'rtasidagi o'zaro bog'liq va to'liq bo'lmagan realizatsiyani amalga oshirish korxonaning faoliyatining alohida yo'nalishlari bo'yicha ijobiy samaraga ega bo'lishi mumkin, biroq korxonaning umumiy innovatsion rivojlanishi sinergetik samaradan mahrum bo'ladi. Innovatsion loyihani amalga oshirish to'g'risida qaror qabul qilishda resurslar manbalari va yakuniy innovatsiyalar iste'molchilari tahlil qilingan bo'lishi zarur, ya'ni korxonaning tashqi muhit tahlili o'tkazilishi kerak. Mazkur omillar bir vaqtning o'zida innovatsion loyihani amalga oshirish va qaror qabul qilish jarayonida hisobga olinishi kerak. Aynan shuning uchun moliyaviy va resurs ta'minotidagi mavjud cheklolarni hisobga olgan holda, innovatsion faoliyatni amalga oshirish doirasida ulardan foydalanishni optimallashtirish natijasida innovatsion rivojlanishning maqsad va vazifalari asosida korxonaning innovatsion faoliyatini kompleks boshqarishni amalga oshirish muhimdir.

Korxonaning innovatsion faoliyatini boshqarish sxemasini amalga oshirishda quyidagi vositalarni kiritish muhim hisoblanadi:

- innovatsion g'oyalarni joriy etish uchun istiqbolli loyihalarni tanlash vositasi;

- innovatsion faoliyatning tashqi va ichki omillarini hisobga olgan holda innovatsion loyihalarni baholash vositalari;

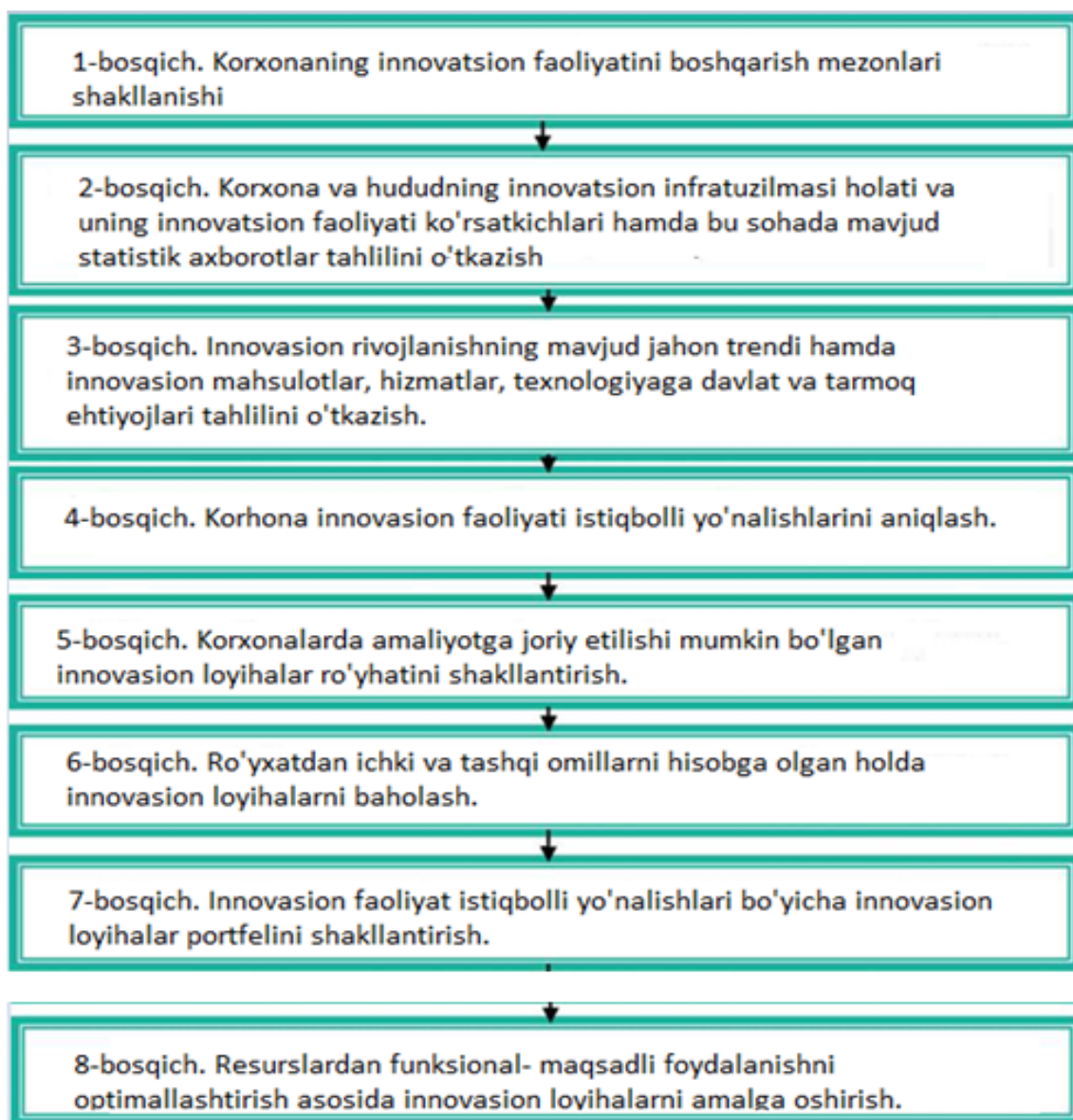
- sanoatning fan sig'imi yuqori tarmoqdari korxonalarida innovatsion loyihalarni amalga oshirishni optimallashtirish vositalari.

Korxonaning innovatsion faoliyatini boshqarishning yuqorida keltirilgan vositalarini hisobga olgan holda uni realizatsiya qilish algoritmi quyidagi bosqichlardan iborat (1-rasm).

Birinchi bosqichda korxonaning rivojlanishiga davlat, tarmoq va korxonaning rahbariyati qarashlarining rasmiyligidan iborat korxonaning innovatsion faoliyatini boshqarish mezonlarini shakllantirish zarur. Bu qarashlar korxonaning innovatsion faoliyati samaradorligi ko'rsatkichlari, korxonaning faoliyatining alohida ustuvor yo'nalishlari, realizatsiya qilinayotgan loyihalarning yo'l qo'yilishi mumkin bo'lgan risk darajasi, loyihalarning innovatsionligi va iqtisodiy samaradorlikning maqsadli ko'rsatkichlarida ifodalanadi.

Ikkinchi bosqichda korxonaning innovatsion infratuzilmasi holati va uning innovatsion faoliyati ko'rsatkichlari hamda ushbu sohada mavjud statistik axborotlar tahlilini o'tkazish kerak. Mazkur axborot turli yo'nalishlarda innovatsion faoliyatni muvaffaqiyatli amalga oshirish uchun korxonaning imkoniyatga ega ekanligini ifodalaydi.

1-rasm. Korxonaning innovatsion faoliyatini boshqarish algoritmi



Turli xil yo'nalishlar bo'yicha innovatsion faoliyatga qo'yilmalar samaradorligi qarab chiqilayotgan korxonada doirasida texnik jihozlanishi, kadrlar salohiyati, mavjud an'analar va u yoki bu innovatsion ishlanmalar tajribasiga bog'liq holda bir-biridan farq qiladi.

Uchinchi bosqichda innovatsion rivojlanishning mavjud jahon trendi va hamda innovatsion mahsulotlar, xizmatlar va texnologiyalarga davlat va tarmoq ehtiyojlari tahlilini o'tkazish zarur. Innovatsion faoliyat samaradorligining ajralmas qismi bo'lib, uning natijalariga talab hisoblanadi. Innovatsion faoliyatning kutilayotgan natijalariga talabni istiqbollashtirishga harakat qilish uchun korxonada faoliyatining yo'nalishlariga innovatsion qarorlarda davlat buyurtmalari, tarmoq va bozor talabini aniqlash zarur. Biroq innovatsion loyihalarni amalga oshirish yetarlicha uzoqroq vaqtni qamrab olishi mumkin.

Buning asosiy sababi davlat buyurtmasi, tarmoq va bozordagi talabga qarab innovatsion qarorlar o'zgarishi mumkin. Shuning uchun innovatsion faoliyatning turli yo'nalishlarida trendlar va tendentsiyalarning o'zgarishini monitoring va tahlil etish kerak.

To'rtinchi bosqichda korxonaning innovatsion rivojlanishini istiqbolli yo'nalishlarini aniqlash zarur. Korxonaning innovatsion loyihalarini realizatsiya qilishning ustuvor yo'nalishlarini aniqlashda quyidagi omillarni e'tiborga olish kerak:

- korxonaning ichki resurslarining miqdor va sifat ko'rsatkichlari;
- innovatsion faoliyat sohasida mavjud tendentsiyalar;
- innovatsion faoliyatni amalga oshirish doirasida korxonaning manfaatlari;
- innovatsion faoliyatni amalga oshirish doirasida tarmoq manfaatlari;
- innovatsion faoliyatni amalga oshirish doirasida davlat manfaatlari;
- innovatsion faoliyatni moliyalashtirishni amalga oshirishda investor manfaatlari.

Sanoat korxonalarida ishlab chiqarishni rivojlantirish, mahsulot hajmini oshirish, uning sifatini yaxshilash, ishlab chiqarish samaradorligiga erishish uchun fan-texnika taraqqiyotini jadallashtirish zarur. Bu faoliyat ma'lum iqtisodiy chora-tadbirlarni ishlab chiqish asosida amalga oshiriladi. Chora-tadbirlar albatta samarali bo'lishi kerak. Uni hisobga olmasdan, baholamasdan innovatsion loyihalarni ishlab chiqarishga joriy etib bo'lmaydi.

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*Xoshimov S.S.
Farg'ona davlat universiteti tayanch doktranti,
Oziq-ovqat texnologiyasi va muhandisligi xalqaro
instituti katta o'qituvchisi*

INSON TUSHUNCHASINING G'ARB VA SHARQ FALSAFASIDAGI GNOSEOLOGIK TAHLILI

Annotatsiya. Maqolada insonni kelib chiqishi, uni g'arb va sharq falsafasida tutgan o'rni, shuningdek turli faylasuf olimlarning inson to'g'risidagi fikrlar o'rin olgan.

Kalit so'zlar: Inson, "kosmobiopsixososiomadaniy" mavjudot, insoniy ruh va ma'naviyat, sharq falsafasi, g'arb falsafasi, falsafiy antropologizm, shaxsiy najot, ijtimoiy taraqqiyot.

*Xoshimov S.S.
doctoral student
Fergana State University
senior lecturer
International Institute of Food Technology and Engineering*

GNOSEOLOGICAL ANALYSIS OF HUMAN CONCEPT IN WESTERN AND EASTERN PHILOSOPHY

Abstract. The article is devoted to the origin of man, his role in Western and Eastern philosophy, as well as the views of various philosophers on people.

Keywords: human, kosmobiopsychosociocultural creature, human spirit and spirituality, Eastern philosophy, western philosophy, philosophical anthropology, personal salvation, social development.

Insonning yaralishi, mohiyati va jamiyatda tutgan o'rni masalasi barcha davrlarda muhim o'rin tutishi bejiz emas. Turli ta'limotlarda bu masalalar turlicha talqin etib kelingan. Shunday bo'lishi tabiiy ham edi, chunki inson mohiyatan ijtimoiy-tarixiy va madaniy mavjudot sifatida har bir yangi tarixiy sharoitda o'zligini chuqurroq anglashga, insoniy mohiyatini ro'yobga chiqarishga intilaveradi. Binobarin, Suqrotning "O'z-o'zingni anglagin va bilgin" degan hikmatli so'zi har bir tarixiy davrda yangicha ahamiyat kasb etadi. Inson o'tgan davr mobaynida ne-ne mashaqqatlarga duch kelganiga qaramay tabiatning buyuk sirlarini hamda o'z-o'zini asta-sekin, izchillik bilan anglab bormoqda.

Bugun kunda insonni "kosmobiopsixosotsiomadaniy" mavjudot deb ta'riflashimiz mumkin bo'lmoqda. Ya'ni insonni koinotning bir bo'lagi, ruhiyat

sohibi, ijtimoiylashgan va madaniyat bilan uyg'unlashgan mavjudot sifatida ko'rmoqdamiz.¹⁰⁹

Ha, odamzot tabiat sirlarini ochish yo'lida sobitqadamlik bilan ildamlamoqda, ammo u o'zligini anglash borasida ham shunday muvaffaqiyatga erishdi deb ayta olamizmi? E'tirof etmoq lozimki, inson hali o'z tabiati haqida aniq tasavvurga ega bo'lolgani yo'q. Unga insonni bilishdan ko'ra olam sirlarini ochish osonroq. Deyarli uch ming yildan beri faylasuflar inson o'zi kim, qaydan keladi-yu qayga ketadi degan savollarga javob topishga urinadilar. Ammo haligacha bu savollarga aytarli javob topilgani yo'q. Shunisi aniqki, inson o'z tabiatini anglamaguncha, o'zining cheksiz koinotdagi o'rnini bilib olmaguncha, inson ko'nglidagi kechinmalarga, ijtimoiy, milliy va xalqaro munosabatlarga oid muammolarni hal qila olmaydi. Inson tabiati - g'oyat murakkab. Unda hayvoniy va ilohiy sifatlar mujassamlashgan. Lekin u - hayvon ham, farishta ham emas. Insoniy ruh va ma'naviyat uni boshqa mavjudotlardan yuqori darajaga ko'taradi.

Butun dunyoda inson fikrlash va mantiqning bir xil usullariga rioya qiladi. Inson ongining xususiyatlari umumiy va bir xildir. Inson ongi o'xshash bo'lishiga qaramay turli mintaqalarda yashovchi odamlar bir qator umumiy muammolarga turlicha yondasha boshladilar. Shu bois sayyoramizning turli mintaqalarida yashovchi odamlar bir xil muammolarning har xil jihatlariga e'tibor qaratishgani tabiiy hol.

Sharq va G'arb faylasuflarining qarashlarida o'xshashliklar ko'p, biroq Hindiston, Yunoniston va Xitoydagi dunyoqarashning har xil jihatlariga beriladigan urg'udagi tafovutlar qadim zamondan hozirgacha yozilgan kitoblarda yaqqol ko'zga tashlanadi. Hind falsafasi insonning ichki olamiga ko'proq e'tibor qaratgan. Faylasuflar insonning tabiatini tushunishga intilishgan.

Yunon faylasuflarini asosan atrofimizni qurshab turgan tashqi olam xususiyatlari qiziqtirgan. Ular insonning borliqdagi o'rnini aniqlashga intilganlar. Shu bois ular tutgan yo'l hindlar tutgan yo'ldan ko'ra osonroq va yengilroqdir. Xitoyda ham faylasuflarni insonning ichki va tashqi olami unchalik qiziqtirmagan. Bugun buddaviylikning Xitoy taraqqiyotidagi o'rniga urg'u berilishi bejiz emas. Bu farqlar falsafaning ushbu mintaqalardagi keyingi taraqqiyotiga katta ta'sir ko'rsatgani bizga ma'lum.

Yevropa tafakkurining taraqqiyotiga Aflotunning g'oyaviy konsepsiyalari va nasroniylik kuchli ta'sir ko'rsatgani shubhasiz. O'rta asr G'arb falsafasi insonga ikki negiz: oliy (ruh) va past (tan) bir-biri bilan uzluksiz kurash olib boruvchi mavjudot sifatida qaradi. Yevropadagi din falsafasining "otasi" Avreliy Avgustin insonning mohiyatini aynan ruh va tana tashkil etadi, deb hisobladi. Tana vaqtinchalik qobiqdan, ruh "zindoni"dan boshqa narsa emas deb ta'kidladi. Din falsafasining yana bir vakili Foma Akvinskiy esa odam ruh bilan tanning uyg'un birligidan iborat va bu hol uni quyi, hayvoniy dunyo bilan oliy, ilohiy, farishtalar olami o'rtasida arosatda qolgan mavjudot qilib qo'yadi. Unda

¹⁰⁹ Khoshimov S. INTERPRETATION OF HUMAN PROBLEMS IN PHILOSOPHICAL THINKING OF EAST AND WEST // Экономика и социум. 2021. №11-1 (90).

jismoniylik qancha ko‘p bo‘lsa, u hayvonga shunchalik yaqinlashadi, ruhiyat qancha ko‘p bo‘lsa u shuncha farishtalarga yaqinlashadi.

Yangi davr boshlanishi bilan Yevropa falsafiy tafakkuridagi diniy-idealistik yo‘nalish o‘z o‘rnini falsafiy dunyoqarashga bo‘shatib berdi. G‘arb insonga ob‘yektlar ichidagi bir ob‘yekt deb qarab, inson hayotining barcha sohalarida ilmiy konsepsiyalar va ilmiy metodlarni qo‘llashga urindi. Shu bois nemis faylasufi I.Kant “inson dunyodagi eng asosiy mavjudotdir”. U bir tomondan, tabiatga tegishlidir, ikkinchi tomondan - axloqan erkin va uchinchidan, doimo qadriyatlar bilan ish ko‘radi. Bu sifatlarning birinchisida inson zaruriyat oldida tursa, ikinchisida ma‘naviy erkinlikka egadir deb ta‘rifladi.¹¹⁰ Vaqt o‘tishi bilan materialistik va ilmiy yo‘nalish G‘arbda keng tarqalgan dunyoqarashga aylandi.

G‘arbda XIX asr falsafiy fikrning inson haqidagi ta‘limotni rivojlantirishdagi eng muhim yutuqlaridan biri - bu L.Feyerbaxning falsafiy antropologizmidir. U inson mohiyati muammosini falsafaning “birdan-bir, universal va eng oliy” muammosi sifatida qaradi va birinchi o‘ringa olib chiqdi.¹¹¹ Biroq Feyerbax, aslida, insonga biologik nuqtai nazardan qaraydi, uning ijtimoiy mohiyatini izohlamaydi, ya‘ni, yuqorida qayd etilgan “sotsio” mavjudot ekanligi e‘tiborsiz qolgan.

Inson to‘xtovsiz rivojlanayotgan jonzot degan qarashning aksi o‘laroq Sharqda biz mutlaqo boshqa inson tushunchasiga duch kelamiz. Sharq-musulmon falsafasi doirasida inson muammosiga ikki xil yondashuvni ko‘rishimiz mumkin. Ulardan biri ko‘proq taqdir haqidagi islom aqidasiqa suyanadi. Qadim zamonlardan oq Sharq mutafakkirlari ma‘naviyat insongagina xosligini ta‘kidlashgan. Inson qalbini mushohada qilish, ma‘naviyatli inson tushunchasi Sharqdagi barcha mamlakatlarda falsafiy tafakkurga salmoqli ta‘sir ko‘rsatdi. Inson mohiyati, uning hayotdagi o‘rni va qadr-qimmat, iymon-e‘tiqodi, odob-etikasi masalasiga sharq faylasuflari alohida e‘tibor berganligini ko‘rishimiz mumkin.

Sharqcha inson tushunchasi odamni “Hazrati Inson” deya ulug‘lar ekan, unda komillik, olimlik, qodirlik kabi ollohga xos ko‘pdan-ko‘p xususiyatlarni ko‘rishni istaydi. Shu bois insonda ularga intilishdan boshqa ulug‘ maqsad bo‘lishi mumkin emas. Shu jihati bilan u boshqa barcha jonzotlardan ustundir. Mavlono Jaloliddin Rumi ta‘kidlashicha “Mo‘min so‘fiy Xudoning vujudini isbotlamasligi kerak, balki uni qalban his etishi lozimdir”.¹¹²

Shuni esda tutish lozimki, inson real ijtimoiy munosabatlarning in‘ikosidir. Insonning shakllanishi va rivojlanishining muhim omili sifatida uning ijtimoiy faoliyati, ijtimoiy hayotda muayyan rolni bajarishida namoyon bo‘ladi. Inson shaxs sifatida faqat turli tuman ijtimoiy munosabatlardagina o‘z-o‘zini namoyon etishi mumkin. O‘z vaqtida Arastu “insonning vazifasi uning ongli faoliyatidan

¹¹⁰ Kant I. Soch. T.N.Ch 1. M., 1965. 153-b.

¹¹¹ Философия. Ростов-на-Дону, 1996. 264-b.

¹¹² Jaloliddin Rumi. Ichindagi ichingdadir. Toshkent: Yozuvchi, 1998. – B. 107.

iborat” deb hisoblagan edi. A.Jomiy “Qo‘llaring baquvvat ekan, mavjud ekan kundalik mehnatga ko‘ngil qo‘y” deya da’vat etgan bo‘lsa, Ibn Sino “Bekorchiilik va ishyoqmaslik faqat nodonlikka sabab bo‘libgina qolmay, ayni paytda kasalliklarga ham sabab bo‘ladi” deb ogohlantirgan edi. Prezidentimiz Shavkat Mirziyoyevning 2018 yil Oliy Majlisga Murojaatnomasida Najmiddin Kubroning “Muvaffaqiyatni – sa’y-xarakatda, muvaffaqiyatsizlikni esa – loqaydlik va dangasalikda ko‘rdim” degan so‘zlari bejiz keltirilmagan.¹¹³

Insonning hayotiy faolligi uning shaxsining shakllanishining asosiy omili sifatida namoyon bo‘ladi. Mazkur jarayon davomida faqat tabiiy va ijtimoiy dunyoga moslashish yuz berib qolmasdan balki inson uni o‘z xohishiga mos ravishda o‘zgartiradi. Bunda chinakam insoniy, shaxsiy, ijtimoiy taqozo etilgan olam shakllantiriladi. Jamiyatning o‘zi, uning tizimi va tuzilishi, undagi munosabatlarni tashkil etuvchi unsurlar - bularning hammasi shaxs bunyodkorlik faoliyatining, uning dunyoni o‘zgartiruvchi ijodiy faoliyatining natijasi. I.Kant insonning jamiyatdagi o‘rni va roli haqida “Inson faqat vosita sifatida emas, balki maqsad sifatida ham o‘z-o‘zicha mavjud bo‘ladi..., o‘zining barcha xatti-harakatlarida u maqsad sifatida ham qaralishi zarur”, - deb ta’kidlaydi.¹¹⁴

Kelajak uchun inson tushunchasining sharqcha va g‘arbcha sintezi nima uchun bu qadar muhimligining sabablari bor albatta. Ilm-fan o‘z-o‘zidan xolisdir. Ilmiy kashfiyotni bunyod qilish uchun ham, vayron qilish uchun ham qo‘llash mumkin. Bu ilmni egallagan kishining aql-idroki va fikrlash tarziga bog‘liq. Agar insonga faqat rivojlanuvchi mavjudot sifatida qarasaq, unda hech nima hayvoniy nafs va ehtiyojlarini qondirish uchun foydalanishiga to‘sqinlik qilolmaydi. Agar insonga hazrati inson, ma’naviyatli inson sifatida yondashsak, u egallagan ilm yer yuzida tinchlik va totuvlikka erishilishiga va hamma odamlarning ezgu orzuniyatlarini ro‘yobga chiqishiga xizmat qiladi.

Yakunda esa sharqcha va g‘arbcha inson tushunchasi ma’lum darajada birbirini to‘ldirishi lozim. Birida insonning azizu-mukarramligi ta’kidlansa, boshqasida inson erishgan va o‘z kuchi bilan erishishga qodir bo‘lgan taraqqiyotga alohida ahamiyat beriladi. Birida inson tabiatining ma’naviy asosiga e’tibor qaratilsa, ikkinchisi ma’naviy ustunlik moddiy asosga ham tayanishini qayd etadi.

O‘rtadagi mavjud farqlar ta’lim sohasiga ham o‘z ta’sirini o‘tkazganini ko‘rishimiz mumkin. Sharqda ham, G‘arbda ham ta’lim tizimlarining o‘z qoidalari mavjud. Sharqda shaxsiy najot tushunchasiga katta e’tibor qaratiladi. Inson o‘zini qutqarish uchun ilmga intiladi. Shaxsiy najot muammosini birinchi o‘ringa qo‘yuvchi Sharq tafakkuri ijtimoiy farovonlik va taraqqiyotga har doim ham yetarlicha e’tibor qaratmagan. G‘arbda esa aksincha, ijtimoiy taraqqiyot masalalariga ustuvor ahamiyat berilgan. Haqiqatda esa ijtimoiy farovonlikka bunday katta e’tibor qaratilishi ba’zan inson qadr-qimmatini kamsitiladigan totalitar

¹¹³ O‘zbekiston Respublikasi Prezidenti Shavkat Mirziyoyevning Oliy Majlisga Murojaatnomasi. “Xalq so‘zi” gazetasi, 2018 yil 29 dekabr.

¹¹⁴ Kant I. Soch. T.N.Ch 1. M., 1965. 269-b.

jamiyatlar paydo bo'lishiga olib kelgan. Ilm-fan rivojlanishi tufayli Sharq va G'arbda bugungi kunda shaxsga, jamiyatga nisbatan bo'layotgan turlicha pessimistik munosabatlarga barham berilib, ikkovining ham muhimligi e'tirof etilishi va har ikkalasiga yetarlicha e'tibor qaratiladigan ta'lim tizimi yaratilishi lozim.

Shu tariqa ta'limning bugungi kunimizdagi ahamiyati ayon bo'ladi. Tadqiqodlardan bizga ma'lumki, ta'lim insonni, u orqali esa jamiyatni o'zgartirishga qodir. Kishi shaxsga aylanmagan joyda jamiyat mukammal bo'la olmaydi. Shu bois hozirgi zamonda ta'lim barkamol insonni tarbiyalashga xizmat qilishi, sharqcha va g'arbcha inson tushunchalari esa bu jarayonga o'z ulushlarini qo'shishlari lozim.

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*Xudoyorov L.
Shahrisabz davlat pedagogika instituti
Geografiya fani o'qituvchisi
Geografiya va iqtisodiy bilim asoslari yo'nalishi
Mavlonova S.H.
3-bosqich talabasi*

DUNYO XALQLARINING TARKIBIY TUZILMALARI VA ULARNING GEOGRAFIK NAMOYON BO'LISHI

Annotatsiya. Ushbu maqola orqali siz, qadimgi dunyo xalqlarining qanday paydo bo'lganligi va qay yo'sinda shakllanganligini, shu bilan birga, ulaning tarkibiy tuzilmalarining o'rtasidagi farqlar natijasida yuzaga kelgan omillar va ularning geografik namoyon bo'lishida hududning ahamiyati qanchalik muhim ekanligi haqida ma'lumotlarga ega bo'lasiz. Bundan tashqari, yo'lga qo'yilgan kamchiliklar tahlil qilinib, bugungi kundagi dunyo xalqlarining o'rtasidagi farq taqqoslangan va yuzaga kelgan muammolar yuzasidan taklif va yechimlar berilgan.

Kalit so'zlar: Dunyo aholisi, tarkibiy tuzilmalar, geografik jihat, muammolar, rivojlanish, etnik tarkib, etnografiya, zichlik.

*Khudoyorov L.
Geography teacher
Shahrisabz State Pedagogical Institute
The direction of the basics of geography and economic knowledge
Mavlonova S.H.
3rd grade student*

COMPOSITION STRUCTURES OF THE NATIONS OF THE WORLD AND THEIR GEOGRAPHICAL DISTRIBUTION

Abstract. Through this article, you will learn how the peoples of the ancient world arose and how they were formed, at the same time, about the factors that arose as a result of the differences between their structural structures and how important the territory is in their geographical manifestation. you will have information. In addition, the shortcomings were analyzed, the differences between the nations of the world today were compared, and suggestions and solutions were given for the problems that arose.

Key words: World population, structural structures, geographical aspect, problems, development, ethnic composition, ethnography, density.

Insoniyat paydo bo'libdiki, jamoaviy bo'lib yashab kelgan. Tarixiy taraqqiyotning yuksalishi davomida jamoalar kengayib, turli xil etnografik

birliklarning rivojlanishi natijasida turli xil xalqlar paydo bo'lgan. Ma'lumki, bundan 10-15 ming yillar muqaddam Yer yuzida aholi son jihatidan juda kam bo'lgan va sekinlik bilan ko'paygan. O'sha vaqtlarda inson tabiatga qaram bo'lgan. Odamlar ovchilik, termachilik va oziq-ovqat yig'ish bilan kun kechirganlar. Keyinchalik chorvachilik va dehqonchilikning rivojlanib borishi bilan aholining o'sishi ham birmuncha tezlashdi. Hozirgi vaqtda aholi sonining o'sishi ayrim Qit'alar, davlatlar o'rtasida va hatto yirik mamlakatlarning ichida ham farq qiladi. Bu juda ko'p omillarga bog'liq, masalan, ijtimoiy-iqtisodiy taraqqiyoti, farovonlik darajasi kabi ko'rsatkichlarga bog'liqdir. Hozirda Yer yuzida "*DeutscheWelle*"ning turkcha nashri xabariga ko'ra 2024 yilning boshidan hisoblaganda dunyoda 8 milliard 73 million 859 ming 407 kishiga yaqin odam yashaydi. Ular turli xalqlarga mansub. Har birining soni 100 milliondan ortiq xalqlar mavjud bo'lib, ularning asosini ko'proq bir millat vakillari tashkil etadi. Masalan, xitoylar, yaponlar, ruslar, bengallar misol bo'lsa, nemislar, italiyanlar, fransuzlar esa bir necha milliondan iborat. Shuningdek, kam sonli xalqlar ham bor. Bular orasida eng kichigi – Fillipin orollarida yashovchi **TASADAY** qabilasining vakillari kiradi. Bu qabila vakillarining soni 50 kishiga ham yetmaydi. Ular tog' yonbag'irlarida yashaydilar. Ovchilik va yovvoyi o'simliklarni terish bilan kun kechiradilar. Yaqinga qadar ular o'zlaridan boshqa odamlar borligini bilmaganlar ham. Yer yuzida hammasi bo'lib, 2 mingga yaqin katta va kichik xalq mavjud. Ular turli tillarda so'zlashadilar, ularning urf-odatlariga ham turlicha. Xalqlar tashqi ko'rinishi bilan ham farqlanadilar. Masalan, yaponlar dag'al qora sochli va bodomko'z, barcha bengallar qorachadan kelgan, tropik Afrikada yashovchi xalqlar esa qora tanli, sochlari jingalak bo'ladi.

Har bir xalq o'zining maxsus tilida so'zlashadi. Biroq bundan mustasno holatlar ham mavjud. Masalan, inglizlar va amerikaliklar bir xilda ya'ni inglizchada, lyuksemburgliklar va avstryaliklar esa nemis tilida, ispanlar hamda Janubiy va Markaziy Amerikaning ko'pchilik xalqlari ispancha so'zlashadilar. Lekin ular ham turli xalqlardir. Ularning har biri o'z tarixi, turmush tarzi va urf-odatlariga ega. Xalqlar o'rtasida tafovutlar ko'p, lekin ularning o'xshashlik va umumiylik tomonlari ham mavjud. Xalqlarning hammasi bir bo'lib, insoniyatni tashkil etadi.

Mana shu insoniyatning tarkibiy tuzilmalari va ularning geografik manzarasini ilmiy asosda o'rganish zamonaviy geografiyaning dolzarb mavzularidan biridir. Xalqlarning hududiy joylashuvi va tarkibiga ta'sir etuvchi omillar kabi bo'limlarga bo'lib oldik. Aholi moddiy ne'matlarning asosiy ishlab chiqaruvchisi va ayni vaqtda uning asosiy iste'molchisidir. Demografik jarayonlar, ya'ni aholinning ko'payishi, o'sishining xususiyatlariga oid sur'ati, tug'ilishi, o'lim, nikohda bo'lish darajasining o'zgarishi, avlodlar almashinuvi, umr ko'rish davomiyligi, jinsiy balog'at va oila tarkibi kabilar butun jamiyat rivojlanishi bilan o'zaro jips hamda uzviy aloqadordir.

Ular jamiyat rivojlanishiga tobe bo'lib, unga ta'sir o'tkazadi. U yoki bu davlatlarda ijtimoiy-iqtisodiy o'zgarishlar kechishini osonlashtiradi yoki

qiyinlashtiradi. Shuning uchuun ham aholi sonining o'zgarishiga aloqador muommolar, uning hududiy joylashuvi va mamlakat iqtisodiyotiga ta'siri ko'plab olimlar, demogroflar, iqtisodchilar, geograflar, faylasuflar, huquqshunoslar, tibbiyotchilar va boshqalar diqqatini doimo jalb etib keladi. Aholi sonining o'sib borishi, mehnat resurslaridan foydalanish, aholini oziq-ovqat va boshqa kunlik ehtiyojlarini qondirish hamda boshqa muammolar aholi geografiyasi fanining eng asosiy muommolaridir. Aholini tadqiq etish va jamiyat rivojlanishidagi ro'lini ta'riflash, shuningdek jamiyat taraqqiyotida turlicha o'ringa ega bo'lgan aholi qatlamlarini o'rganishda juda ko'plab ish qilingan va nazariyalar yaratilgan. Bunday nazariyalar va qonuniyatlar ishlab chiqarish negizida aholining rivojlanishini tushuntirib berishga qaratilgan bo'lib, insoniyat kelajagi va taraqqiyotini boshqarish hamda prognoz qilishda muhim ro'l o'ynaydi. Aholining rivojlanishi haqidagi nazariyalar vaqt nuqtayi-nazardan nisbiydir va bu nazariyalarning qanchalik hayotiy ekanligini vaqt ko'rsatadi. Aholi va uning faol qismi bo'lgan mehnat resurslari makroiqtisodiyotning asosiy qismi hisoblanadi. Makroiqtisodiyot aholi va mehnat resurslarining ijtimoiy iqtisodiy yo'nalishlarini tadqiq etish orqali uni samarali boshqarish va milliy iqtisodiyotni rivojlantirishni maqsad qilib oladi. Chunki, mehnat resurslari va uning faol qismi bo'lgan ishchi kuchi ishlab chiqaruvchi kuchlarning eng asosiy qismidir. Shu bilan birga mehnat resurslari bozor iqtisodiyoti munosabatining tarkibiy elementlaridir. Shu sababli mehnat resurslarini har tamonlama o'rganib, uni iqtisodiy geografik jihatdan baholash maqsadga muvofiq.

Bundan tashqari aholi joylashuvi haqida gapiradigan bo'lsak, u ma'lum vaqt davomida aholining hududlar bo'ylab tarqalishi va aholi maskanlari to'ring shakllanishi natijasida yuzaga keladigan jarayondir. Bu jarayon qator omillar bilan bog'liq. Ularga tabiiy sharoit va aholi manzilgohlari shakllanishining tarixiy xususiyatlari, demografik o'tish bosqichlari, rivojlanish darajasi, sotsial-iqtisodiy omillar bilan bir qatorda xo'jalik tarkibini kiritish mumkin. Aholi joylashuvida eng asosiy omil bu tabiiy sharoit hisoblanadi. Dunyo aholisining asosiy qismi ham inson yashashi uchun qulay tabiiy sharoitga ega bo'lgan, shuningdek, qishloq xo'jaligi bilan shug'ullanish imkoniyati bor hududlarda joylashgan. Tabiiyki, bu mehnat resurslarining ham shakllanishida muhim ahamiyat kasb etadi. Masalan, tabiiy sharoiti inson yashashi uchun qulay, suv resurslari mavjud hududlarda, ya'ni, O'rta dengiz atroflarida, Shimoliy Afrika, Yevrosiyo materigining janubida aholi zichroq joylashgan. Eramizning boshlarida aholi asta-sekin dehqonchilik va chorvachilik bilan shug'ullana boshlaydi. Odamlar moddiy ne'matlarni o'zlari mehnat qilib yaratishga o'tganlar va ishlab chiqarish jarayoni yetakchilik qila boshlaydi. Ular ma'lum bir hududlarda o'troq bo'lib yashashga, o'tadilar va aholi punktlarini quradilar. Natijada, avval qishloq maskanlar, keyinchalik shahar maskanlari paydo bo'la boshlaydi. Aholining turmush tarzi yaxshilana borishi bilan, insonlar hayotida ijtimoiy o'zgarishlar sodir bo'ladi.

Hozirgi davrda esa Yer yuzi bo'ylab aholi juda notekis joylashgan. Sayyoramizda aholi juda zich (1 km. kv.ga 1000 kishi) yashaydigan hududlar ham

uchraydi. Bundan tashqari, aholi juda siyrak joylashgan hududlar ham mavjud. Bu yerda havo haroratining juda pastligi, mavjud bo'lgan suvning muz holatida ekanligi va shu kabi bir qancha sabablar mavjud. Bunday hududlar Yer sharidagi quruqlikning 10 % ini tashkil etadi. Ularga Shimoliy va Janubiy qutblar, balandligi 5000 metrdan ziyod bo'lgan tog'lar va sahrolar kiradi. Yer sharidagi quruqlikning 50 % aholi uchun tabiiy sharoiti noqulay hudud hisoblanib ularda aholi zichligi 1 km. kv.ga 1 kishidan to'g'ri keladi.

Dunyo aholisining etnik tarkibi haqida gapiradigan bo'lsak, Yer sharida, etnik birliklarning tarkibi asosan, ibtidoiy jamoa tuzumidan toki hozirgacha bo'lgan kategoriyalari, urug', qabila, elat va millatlardan iboratdir. Kishilarning eng qadimgi etnik birligi "*urug*" bo'lib, u asosan ibtidoiy jamoa tuzumida vujudga kelgan. Jamoa tuzumining vujudga kelishi, odamlarning qon-qarindoshliklariga asoslangan. Urug'chilikning asosiy belgilari quyidagilardir:

- 1) urug' a'zolarining bir-biri bilan qarindoshligi
- 2) xo'jalik faoliyatining birligi
- 3) ijtimoiy hayotning, turmush tarzining va o'sha davrga xos bo'lgan madaniyati bilan tavsiflanadi.

Etnik tarkibning ikkinchi yuqoriroq qismi "*qabila*" dir. Uning tavsifini o'z tili va shevasiga, hududiga ega bo'lgan, shuningdek maxsus kengash tomonidan boshqarilgan jamoa sifatida ifodalash mumkin. *Elat* esa keng qamrovli tushuncha bo'lib, asosan feodalizm jamiyati davrida ya'ni quldorlik davrida shakllana boshlagan. Elat kishilarning millatdan oldingi tarixiy birligidir. Elatlarning o'z nomlari, tili, umumiy madaniyati va psixik xususiyatlari tarkib topgan. Elatlar o'zining hududiga ega bo'lishi bilan birga ma'lum darajada iqtisodiy aloqalar ham qilishgan. Millat bir so'z bilan aytganda yuqorida nomi qayd etilgan xususiyatlarni o'zida mujassamlashtirishi bilan birga, milliy ongning rivojlanganligi bilan farqlanadi. Ammo rivojlanishning kapitalizm sharoitida barcha xalqlar ham alohida millat sifatida tashkil topadi deb bo'lmaydi. Chunki xalqlar o'rtasida tenglikning yo'qligi, ko'p sonli va kuchli xaqlarning ekspluatator sinflar tomonidan mayda xalqlarning shafqatsiz ekspluatasiya qilinishi, madaniyat va iqtisodiyotning rivojlanishi yo'lida sun'iy g'ovlarning vujudga keltirilishi ularning millat sifatida tashkil topishi va rivojlanishiga to'sqinlik qiladi.

Umuman olganda xalqlar geografiyasida etnik jarayonlar, turli xalqlarning madaniyati, hududiy joylanishi, bir-biri bilan o'zaro aralashuvi, mehnat halqalari kabi masalalar muhim ahamiyat kasb etadi. Etnografiya fani esa mamlakatlar va rayonlar aholisining etnik tarkibi, xalqlarning hududiy munosabatlarini, turli etnik guruhlarning oldingi davrlarida, shuningdek, hozirgi hududiy yashash formalarini o'rganuvchi fan hisoblanadi. Ya'ni aholining etnik tarkibini har tomonlama geografik o'rganish ko'pgina demografik jarayonlarni tushunishga yordam beradi. Masalan aholining takror barpo bo'lishini bunga misol qilib keltirish mumkin. Chunki bu borada geografik joylashuv va ijtimoiy-iqtisodiy kelib chiqishi muhim ahamiyat kasb etadi. Aytaylik dunyo aholisining o'sish

su'ratining sekinlashishi ayollarning o'rtacha hisobdan kamroq bola tug'ishi bilan bog'liq. *DSW*ning hisob- kitoblariga ko'ra, iqtisodiy jihatdan anchagina ortda qolgan Afrika aholisi 2080 yilga kelib bugungi kunga nisbatan aholisi 2 barobarga ortib, 2,5 milliardga yetishi prognoz qilingan. Buning asosiy sababi sifatida esa tug'ilishning nazorat qilish usullariga erishishning murakkabligi va gendir tenglikning yo'qligi kabi sabablar asos qilib keltirilmoqda. Mutaxasislarning fikricha, bu kabi salbiy holatlar ko'pincha ayollarning erta yoshdan boshlaboq ko'p farzandli bo'lishga olib keladi.

Xulosa qilib aytganda dunyo xalqlarining tarkibiy tuzilmalari geografik namoyon bo'lishi, Yer yuzidagi insoniyatning paydo bo'lgandan boshlab, rivojlanishi, keng yoyilishi Yer yuzi bo'ylab, tabiiy sharoiti qulay bo'lgan hududlarda tezroq rivojlanib svilizatsiyani hosil qilishi, shuningdek, etnik tarkibiga ko'ra bir-biridan keskin farqlanishi va boshqa turli sabablarni o'z ichiga olgan holda namoyon bo'ladi. Bir so'z bilan aytganda geografik namoyon bo'lishi barcha tabiiy jarayonlarni qamrab oladi.

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*Xudoyorov L.
Shahrisabz davlat pedagogika instituti
Geografiya fani o'qituvchisi
Haydarova N.
Geografiya va iqtisodiy bilim asoslari
yo'nalishi 3-kurs talabasi*

O'ZBEKISTONDA DEMOGRAFIK JARAYONLAR SHAKLLANISHI VA RIVOJLANISHI

Annatsiya. Aholi sonining o'sib borishi (tug'ilish) yoki kamayishi (o'lim), shuningdek, nikoh, ajrim va migratsiya ko'rsatkichlari bilan uzviy chambarchas holda kechadi. Ushbu maqolada demografiyaning fan sifatida paydo bo'lishi, uning rivoji va O'zbekiston aholisining demografik ko'rsatkichlari haqida boradi.

Kalit so'zlar: Demografiya, A.Giyar, O'zbekiston, tug'ilishi, o'lim, nikoh va ajralish, yosh-jinsiy tarkib, oilaviy tarkib, demografik vaziyat, demografik prognoz.

*Khudoyorov L.
geography teacher
Shahrisabz State Pedagogical Institute
Haydarova N.
3rd year student
Basics of geography and economic knowledge*

FORMATION AND DEVELOPMENT OF DEMOGRAPHIC PROCESSES IN UZBEKISTAN

Annotation. Population increases (births) or decreases (deaths) are closely related to marriage, divorce, and migration rates. This article deals with the emergence of demography as a science, its development and demographic indicators of the population of Uzbekistan.

Key words: Demography, A. Giyar, Uzbekistan, birth, death, marriage and divorce, age-sex composition, family composition, demographic situation, demographic forecast.

Demografiya - har yili turli sabablarga ko'ra vafot etgan aholi o'rnini yangidan dunyoga kelgan avlod hisobiga to'ldirib borilishi qonuniyatlarini ijtimoiy-tarixiy sharoitlarga bog'liq holda o'rganadigan fandır. Demografiya terminini 1855-yilda fransuz olimi A.Giyar qo'llagan. XIX asr oxiri va XX asr boshlarida keng tarqaldi. O'zbekistonda asosan 1960-yildan qo'llanila boshladi.

Demografiyaning vazifalari quyidagilardir:

◀ demografik jarayonlar ya'ni tug'ilishi, o'lim, nikoh va ajralish, aholining yosh-jinsiy va oilaviy tarkibi va ularning omillarini o'rganish, demografik prognoz; ◀ hudud aholisining soni, yosh-jinsiy tarkibi va demografik vaziyatlarni oldindan ilmiy prognoz qilish.

Demografik jarayonlarni o'rganishda ko'p ma'lumotlardan foydalaniladi. Tug'ilish, o'lim, nikoh, aholi soni va tarkibi kabi demografik jarayonlar ilmiy jihatdan o'rganilib, tahlil qilinadi va ushbu ma'lumotlar asosida diagrammalar va jadvallar tuziladi. Demografiya aholining miqdoriy va sifatiy o'zgarishlarini, aholining takror barpo bo'lishining asosiy omillari sifatida o'rganadi. Demografiya asosiy e'tiborini tug'ilish va o'lim asosida aholining takror barpo bo'lish jarayonlariga qaratadi. Bu jarayonlarni o'rganish uchun demografiya jamiyat taraqqiyoti, bosqichlari, tarixiy sharoitlarni o'rganishi lozim. Demografiya tug'ilishni, unga ta'sir etuvchi barcha ijtimoiy-iqtisodiy va tabiiy omillarni alohida tahlil etadi.

O'zbekistonda ham demografik tadqiqotlar rivojlanishi o'z tarixiga egadir. 2000-2010-yillarda O'zbekiston Milliy Universiteti geografiya fakulteti qoshida "Demografiya " kafedrasini faoliyat yuritdi. Shuningdek, "Demografiya" kafedrasini Markaziy Osiyoda yagona bo'lgan. Demografik bilimlar qadimdan bo'lgan, buni tarixiy manbalar orqali ko'rganmiz. Lekin O'zbekistonda maqsadli tadqiqotlarni o'tkazish asosan, 1960-yildan boshlangan. Ana shu yillarda demografiya sohasida ko'plab yutuqlarga erishgan olim Q.Qoraxonov hisoblanadi. Q.Qoraxonov demografiya sohasida o'zining ko'plab meroslarini qoldirgan. Q.Qoraxonov aholi o'sishi, tug'ilishi, o'lim, nikoh va ajralish kabi demografik jarayonlarni hamda bu jarayonlarga ta'sir etuvchi omillar, muammolarni ham o'rgandi. Olimning olib borgan izlanishlari, tadqiqotlari asosida monografiya, risolalar va maqolalar chop etilgan. O'lkamiz demografik tarixini va aholi muammolarini o'rganishda R.I.Mullajonov, R.A.Abdullayeva, E.A.Ahmedov, A.S.Soliyev, N.S.Aliqoriyev, A.A.Qayumov, O.E.Ergashev kabi olimlar olib borgan tadqiqotlar demografiya sohasida alohida ahamiyatga ega.

Aholi soni va uning ijtimoiy-iqtisodiy va demografik tarkibi davrlar hamda hududlar bo'yicha doimo o'zgarib turadi. Aholi soni va tarkibida sodir bo'lgan barcha o'zgarishlar mamlakat iqtisodiyotining rivojlanishiga bevosita ta'sir etadi. Har bir mamlakat, davlatning ijtimoiy-iqtisodiy rivojlanishida aholi sonining ortishi va kamayishi, aholi tarkibida mehnat yoshidagi kishilar hamda bolalar va qariyalar salmog'i ham juda muhimdir. Aholi soni va tarkibini hisobga olish uslublari, dasturlari jamiyat rivojlanishi bilan monand rivojlanib boradi. Aholini hisobga olishda to'plangan ma'lumotlar aniqligi, to'la qamrovi va muntazamligi juda muhimdir. Barcha davlatlarda aholining ijtimoiy-iqtisodiy va demografik holatlari hisobga olinib, ma'lumotlar muntazam to'planib boradi. O'zbekiston aholisining ijtimoiy-iqtisodiy va demografik rivojlanishi XIX asrning 2-yarmidan boshlandi. Podsho Rossiyasi bosib olgandan so'ng keskin o'zgardi. 1897-yil aholini ro'yxatga olish jarayonlari o'tkazildi va bu davrda O'zbekistonda 3,9 mln kishi yashagan. Shahar aholisi ulushi juda past bo'lgan, shuningdek tub aholisi

migratsion harakati ham sust bo'lgan. Aholi ko'chib keluvchilar hisobiga o'sgan. Natijada, O'zbekiston hududida yangi qishloqlar, shaharlar va aholi punktlari vujudga kelgan. Biroq shunga qaramay XX asrning boshlarida aholi sonining o'sishida sezilarli o'zgarish bo'lmadi. 1924-1940-yillar davomida O'zbekiston aholisi 2,1 mln. kishiga oshdi, aholining o'sishi yiliga 3% ga teng bo'ldi. 1939-1950-yillarda esa 6,4 mln.dan 6,3 mln.ga kamaydi. Bunga sabab ikkinchi jahon urushi edi. Ikkinchi jahon urushi O'zbekiston aholisining soniga, uning tarkibiga hamda joylashuviga salbiy ta'sir ko'rsatdi. Urush tugagandan so'ng aholi soni oshib bordi. 1959-1970 yillar davomida aholi soni 8,1 mln. kishidan 11,8 mln. kishiga oshdi. Bunga aholining tabiiy ko'payishidan ko'ra chetdan kirib kelganlar salmoqli o'rin egallardi. 1980-1990 yillar aholi soni qariyb 5 mln. kishiga ko'paygan. 2013 yilga kelib esa 30 mln. aholi O'zbekiston hududida istiqomat qilgan. Shuningdek, 1989-2013 yillar oralig'ida aholining milliy tarkibida ham o'zgarishlar ro'y bergan. 1989 yil o'zbeklar ulushi 71,5 foizga teng bo'lsa, 2013 yilga kelib 82,9%ga oshgan, ya'ni aholining milliy tarkibida o'zbeklar salmog'i oshgan. Shu bilan birga mamlakatda 2% dan 3,5% ga Qoraqalpoqlar va 4,5 % dan 4,8% ga tojiklarning salmog'i oshgan. Aksincha ruslar ulushi 8,2% dan 2,7% ga kamaygan va qozoqlar ulushi sezilarli darajada kamaygan. Mamlakatda tub aholi o'zbek millatiga mansub aholi soni 2021 yilga kelib 1989 yilga nisbatan ikki baravardan ziyodga (107% ga) ko'paygan. Mamlakatda millatlar ning geografik joylashi shi ham bir tekis emas. Buning birinchi sababi millatlarning tarixiy rivojlanishi bo'lsa, ikkinchidan respublikada xalq xo'jalik tarmoqlari ning rivojlanish xususiyatlaridir.

Aholining tabiiy ko'payishi birinchi navbatda tug'ilishga bog'liq. 1865-1917 yillarda tug'ilishning umumiy koeffitsiyenti (har 1000 ta bolaga nisbatan tug'ilganlar soni) 45%o ni tashkil etgan. Oilada farzandlar tug'ilishi cheklanmagan. Buning asosiy omili o'zbek ayollarining ijtimoiy ishlab chiqarishda juda kam ishtiroki va qadriyat ta'sirining yuqoriligidir. Shuningdek, bu davrlarda aholining o'lim ko'rsatkichi ham yuqori bo'lgan. 1886-1890 yillarda 1000 ta aholiga nisbatan 49,8 ta bola tug'ilgan bo'lsa, o'lganlar soni esa 44,8 taga teng edi. Bu ko'rsatkichlar o'lim darajasining yuqori ekanligidan dalolat beradi. O'rtacha umr ko'rish davri ham juda qisqa bo'lgan (32 yosh) 1991 yilda O'zbekiston iqtisodiy munosabatlarida ijtimoiy-iqtisodiy o'zgarishlar sodir bo'ldi va bu o'zgarishlar demografik holatga ham o'z ta'sirini ko'rsatdi. O'zbekistonda tug'ilishning yuqoriligi, oila qadriyatlari hamda nikohdan o'tish jarayonlarining yuqoriligidir. Respublikada 1980-1995 yillarda o'lim koeffitsiyenti 7,5 promilledan 6,4 promillegacha qisqardi hamda go'daklar va bolalar o'rtasidagi o'lim darajasi kamaydi. Tibbiy xizmatlarning yaxshilanishi hamda aholi o'limining keskin kamayishiga olib keldi. Shahar hududlarida aholining o'limi qishloq joylardagiga nisbatan yuqori. Bunga sabab shaharda ekologik vaziyatning o'zgarishi, shahar turmush tarzi, aholining muntazam harakatda bo'lmasligi va sof-tabiiy mahsulotlarni iste'mol qilmasligidir.

O'zbekiston aholisi sonining o'zgarishida migratsiyaning ahamiyati ham katta. Aholi migratsiyasi (lotincha "migratsion"- ko'chish) - yashash joyini doimiy yoki vaqtincha o'zgartirish maqsadida ko'chishdir. Hozirgi kunda aholining tabiiy o'sishi, zichligi, uning hududlar bo'ylab joylashuvida ham migratsion harakatlarning ta'siri bor. Migratsiyaning asosiy belgilaridan biri ma'muriy chegarani kesib o'tishidir. Shunga ko'ra migratsiya: tashqi va ichki migratsiyaga bo'linadi.

Tashqi migratsiya - bir davlatdan ikkinchi davlatga, bitta Qit'adan ikkinchi Qit'aga ko'chishidir. Bu jarayonda davlat aholisi qayta taqsimlanadi va ularda aholining ko'payishi yoki kamayishi kuzatiladi.

Ichki migratsiya-bitta davlat ichida aholining hududlar bo'ylab ko'chishidir. Bunda migratsiyada ma'lum davlat ichida shahar va qishloq, tumanlar bo'ylab aholining qayta taqsimlanishi sodir bo'ladi. O'zbekistonda o'tkazilgan aholi ro'yxatlarida respublikaga ko'chib kelib, ikki yildan kam yashagan aholi migrant hisoblangan. O'zbekistonning Podsho Rossiyasi tomonidan bosib olingandan so'ng migratsiya harakatlari ya'ni ko'plab oilalarning ko'chib kelishi kuzatilgan. Hamda ular uchun qulayliklar, ko'plab imkoniyatlar taqdim etilgan. XX asr boshlarida ko'chib keluvchilar salmog'i juda yuqori bo'lgan. Ayniqsa, Mirzacho'lni o'zlashtirish, u yerda qurilish, sanoat korxonalarining barpo etilishi natijasida migratsion oqim kuchlari bo'lgan. Natijada, 1963 yil Sirdaryo va 1973 yil Jizzax viloyatlari tashkil topgan. Respublika aholisi, asosan, qadimdan o'zlashtirilgan, sug'orma dehqonchilik uchun sharoit qulay bo'lgan voha va vodiylarda zich joylashgan.

Mamlakatning shahar aholisi nihoyatda notekis joylashgan. 2022 yilning 1 yanvar holatiga ko'ra, 1 km² o'rtacha 78,6 kishi to'g'ri kelgan. Bu esa o'tgan yilning mos davriga nisbatan solishtirilganda 1,6 kishiga ko'proq (2021 yilda 1 km² 77,0 kishi). Hududlar bo'yicha qaraydigan bo'lsak, aholi zichligining eng yuqori ko'rsatkichi Toshkent shahri (8035,1 kishi), Farg'ona (576,4 kishi) va Andijon (756,6 kishi) viloyatlarida, eng past ko'rsatkichlar Navoiy viloyati (9,3 kishi), Qoraqalpog'iston Respublikasi (11,7 kishi) va Buxoro viloyatida (49,1 kishi) qayd etilgan.

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*Yarmatova M.A.
katta o'qituvchi
Qarshi iqtisodiyot va pedagogika universiteti NTM*

MAQOLLARDA HAYVONLAR OBRAZLARINING TASVIRI

Annotatsiya. Maqolada, hayvonlarni nomi keltirilgan maqollar o'z aksini topgan. Ana shu hayvonlarning har biri timsol qilib olinib, ular vositasida muayyan sifatlar (ijobiy, salbiy) kishilarning obrazlari gavdalanir.

Kalit so'zlar: maqol, hayvon nomlari, timsol, zoonimlar, obraz.

*Yarmatova M.A.
head teacher
Karshin University of Economics and Pedagogy NTM*

IMAGES OF ANIMALS IN ARTICLES

Abstract. This article reflects the proverbs about animals. Each of these animals was personified, and through them images of people of certain qualities (positive or negative) were embodied.

Keywords: proverb, animal names, symbol, zoonyms, image.

Ulug' rus yozuvchisi L.N.Tolstoy "Har bir maqolda shu maqolni yaratgan xalqning siymosi ko'rinadi", - degan edi. Darhaqiqat, maqollarda ota-bobolarimiz bosib o'tgan yo'lni, kechirgan turmushlarini, shodliklarini va chekkan azob-uqubatlarini ajdodlarimizning urf-odatlarini, an'alarini ko'ramiz, his etamiz.

V. Dalning maqol va matallar haqidagi ta'rifi o'ta to'liq aniq va ifodalidir: "Maqollar to'qilmaydi. Sharoit taqozasiga ko'ra yaratiladi va qalb isyoni yoki da'vati sifatida yaratiladi."

"Xalqimizning boshidan kechirgan barcha kechinmalari, ko'p asrlik urushlari o'z aksini topgan folklorni o'rganish juda muhimdir. Chunki u xalqimizning shu kunlardagi ruhiyatini yaxshiroq tushunishga yordam beradi." (G'afur G'ulom)

Maqollar xalqning turmush jarayonlari, mehnat faoliyatlari, tabiatni kuzatish va madaniyatlari asosida yuzaga kelgan.

Maqollarni o'rganish nutq madaniyatini o'stirishga yordam beradi. Tilning milliy xususiyatlarini o'zida mujassam etadigan maqollar o'z ichiga xalqning boy tarixiy an'alarini, mehnat jarayoni bilan bog'liq bo'lgan ko'rinishlarini va insonlarning hayoti va madaniyatini oladi.

Tilimizda hayvon nomlari bilan ifodalangan maqollar, frazeologik birliklar ko'p uchraydi. Hayvonlarni kuzatish natijasida tashkil topgan maqollar o'ziga xos bo'lib, katta o'rin egallaydi. Bu maqollar yordamida atrofimizdagi olam, predmet

va narsalarning obrazli emotsional tasviri, harakatlar va belgilar aniq va chiroyli tarzda ochib beriladi.

Ular insoniyat taraqqiyotining doimiy yo'ldoshlari bo'lmish hayvonlarni kuzatish natijasida yuzaga keladi va xalqning yillar davomida yig'ilgan til boyligi hisoblanadi. Ularning kichik aniq forma va ish harakati asosida chuqur ma'no yotadi. Ayrim olimlar ushbu maqollarni oz ilmiy ishlarida zoonimlar deb yuritishadi.

Zoonimlar hayvonlar dunyosining tashqi ko'rinishi va xususiyatlariga bog'liq bo'lgan obrazli metoforik negizida kishilarning metoforik xarakterini yoki qandaydir harakatning ko'rinishini o'z ichiga oladi.

U yoki bu maqolning ko'chma ma'nosini, unda nima deyilmoqchi bo'layotganini aniqlash uchun maqolda keltirilgan obrazlarning mohiyatini to'g'ri anglamoq kerak xalq og'zaki ijodining ko'pchilik janrlarida, jumldan, maqollarda xalq jamiyatidagi munosabatlar, hodisa va holatlarni soddaroq ifodalamoq maqsadida tabiatdagi o'z xususiyatlari bilan shunga mos keladigan turli hayvonlar obrazidan ustalik bilan foydalanadi. Ana shu hayvonlarning har birini timsol qilib olib, ular vositasida muayyan sifatlariga (xoh ijobiy, xoh salbiy) ega bo'lgan kishilarning obrazini gavdalantiradi.

Eshak va xo'kizni, befahm, befarosat dangasalarga tashbeh qilinadi:

Qanoat aylagan shox-u jahondur,

Tama qilgan eshakdan ham yomondir.

Eshakka xudo shox bersa, hammani
suzadi,

Arpaning ichida kesak bor,
Yomonning ichida eshak bor.

Tuyaga xudo qanot bersa, tomingni
buzadi.

Xarakash eshak yo'lga yaramas.

Yotgan xo'kiz somondan quruq
qoladi.

Eshagiga yarasha tushovi.

Xo'kiz bo'lib, buzoq odatingni
qilmagin.

Eshagidan tushovi qimmat.

Eshak ishi bilan kuchli,
To'ng'iz – tishi bilan.

Yer qattiq bo'lsa, xo'kiz xo'kizdan
ko'rar.

Eshakka ergashgan kulga ag'nar.

Echkini - ayyorlarga, yengil tabiatlilarga tashbeh qilinad:

Echkining o'lgisi kelsa, cho'ponning
tayog'iga suyanar.

O'zini aka degan,
Echkisini taka der.

Echkining yog'i bo'lmas,
Yaxshining – dog'i.

Echki yugurib – kiyik bo'lmas.
Echkida et yo'q, orsizda – bet.

Echkini ajali etsa, qassobni suzar.

Bo'ta, buzoq, to'y, qulun, qo'zi, uloq, kuchuk, xo'tik, poloponni – bolalarga tashbeh qilinadi:

Buzoqni bo'sh qo'ysang, xurmachani
ag'darar.

Buzoq somonxonani bo'shatar,
Bola – nonxonani.

Buzoq ko'p emsa bo'kadi, bo'sh
qo'ysang to'kadi.

Bo'ladigan buzoq tezagidan ma'lum.

Yaxshi buzoq ikki onani emadi,

Ensasi qotgan bittadan ham qoladi.

Itni-ochko'z, tamagir, urishqoq, kaltafahm, ahmoq, dangasa va shu kabi insoniy illatlarga ega bo'lgan kishilarga tashbeh qilinadi:

Itni siylasang, to'rga o'tar.

Itni ursang, aldab ur.

Itni suyak bilan ursang, qopmas.

Itidan suyak kutma.

Itning ajali etsa, mehrobgga o'tirar.

It qorni to'ygan uydan ketmas.

Bo'rini – qonxo'r, zolimlarga tashbeh qilinadi:

Bo'ring bolasini bo'rkingda boqsang
ham, el bo'lmas.

To'y bo'risiz bo'lmas,
To'qay arslonsiz bo'lmas.

Bo'ri qarisa ham bitta qo'yga kuchi
etar.

Dasht bo'risiz bo'lmas,
El o'g'risiz.

Bo'ri bo'ronda quturar.

Sen bo'rini ayasang,
Bo'ri seni talaydi

Tulkini - ayyor, ikkiyuzlamachilarga tashbeh qilinadi:

Bir tulki etti bo'rini yetaklar.

O'xshamagin tulkiga,
Qolarsan ko'p kulkiga.

Ko'z bo'yamachi tulki bo'lar,
El ichida kulki bo'lar.

Hayvonlar ichida ayyori – tulki,
Ma'nisiz g'iybatning oxiri – kulki.

Bir tulkining hiylasi necha yerda pand
berar.

Tulki bo'ridan to'qroq yashaydi.

Quyoni – qo'rqoqlarga tashbeh qilinadi:

Quyoni o'z ko'lankasidan ham qo'rqr.

Quyoni bolasini botirim der,

It bolasini qoplonim der.

Osilmagan qozonga otilmagan quyoni tushar.

No'noq mergan oqsoq quyoni izlar.

Sichqon, kalamush, chumchuq, chigirtkani – tekinxo'r va zararkunandalarga (ayrim hollarda sichqonni - mazlumlarga) tashbeh qilinadi:

Supraga tushgan sichqonning

Boshi oqarmay qolmas.

Ikki sichqon biriksa,
Yo'lbars quyrug'in kertar.

Dushmaning sichqoncha bo'lsa ham,
Beparvo bo'lma.

Tegirmonda tug'ilgan sichqon,
Momaqaldiraqdan qo'rqmas.

Dushmaning sichqoncha bo'lsa ham,
Kuching arsloncha bo'lsin.

Vahti kelsa, fil sichqondan qo'r qar.

Hiyla bilan arslon tutilar,
Kuch bilan sichqon tutilmas.

Chumolini-mehnatkash, mazlumlarga tashbeh qilinadi;

Chumoli iniga cho'p tiqma.

Chumolining sovg'asi – chigirtkaning oyog'i.

Qurbaqani - ishyoqmas, dangasa, quruq, maqtanchoqlarga tashbeh qilinadi:

Ovloq ko'lda baqa xon.

Qurbaqada qomat bo'lmas,
Kambag'alda omad bo'lmas.

Chumolidan qurbaqa xayr so'rabdi.

O'ush yo'q joyda qurbaqa ham bulbul.

Oyda ham dog' bor,

Ko'lda – qurbaqa.

Loysiz suv, qurbaqasiz ko'l bo'lmas.

Xalqimiz sherni-mard, dovyurak, botirlarga tashbeh qiladi:

Sher bolasi ovni engar,

Er bolasi – yovni.

Sherning o'ligi ham ot hurkitar.

Sher izini it bosmas.

Gungqarg'a bo'lib ming yil
yashagandan,

Zo'r ovchi sher otar.

Sher bo'lib bir yil yashagan afzal.

Sherning urg'ochisi ham sher.

Tuya - el – yurt og'alariga, buzruklariga, shuningdek kuchli, chidamli sabotmatonatli, ba'zi hollarda esa takabbur kishilarga tashbeh qilinadi:

Tuyani tuya desa,
hamma erni payhon qilar.

Tuyaning dumi kalta bo'lsa ham,
tulkidan dum so'ramas.

Dushmaning kuya bo'lsa ham, tuya bil.

Tuya mingan uzoqni ko'zlar,
Eshak mingan – yaqinni.

Ignadek teshikdan tuyadek sovuq
kirar.

Yuvosh tuya yulishga yaxshi.

Barcha yukni ko'targan tuya,
Cho'michni ham ko'tarar.

Yomon yo'ldan yurgan tuya cho'kar.

Umuman insoniyat yaratgan maqollarning tematikasi keng va rang-barangdir, ularda ijtimoiy hayotning eng murakkab muammolaridan tortib oilaviy hayotning eng kichik urf-odatlarigacha, oliy axloqiy normalardan tortib kishilar xarakteridagi mayda-chuyda nuqsonlargacha, falsafiy dunyoqarashdan tortib eng kichik jonivorlarning xususiyatigacha o'z aksini topgan.

Zoonimlar kuchli obrazlikka ega bo'lib, nafaqat jonli muloqat tilida, balki badiiy adabiyotda ham kishilarning jismoniy xarakteri, ruhiy, axloqiy, ijtimoiy, tashqi ko'rinishi, ichki kechinmalari, hissiyotlari, kayfiyati va boshqa xususiyatlarni mukammal, ochiq oydin yoritib berishda keng qo'llaniladi.

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*Yo'ldoshov K.Q.
Farg'ona politexnika instituti doktoranti*

SHAHAR KO'CHALARIDA HARAKAT XAVFSIZLIGINI YAXSHILASH CHORA-TADBIRLARI

Annotatsiya. Ushbu maqolada avtomobil yo'llarida harakat havfsizligini tashkil etish, yo'l harakatini tashkil qilishning asosiy maqsad va vazifalari hamda yo'l harakati xavfsizligini oshirishga qaratilgan chora tadbirlarni takomillashtirish usullari yoritilgan.

Kalit so'zlar: yo'l harakati, xavfsiz harakat, transport oqimi, avtomobil, haydovchi, yo'l, piyoda, yo'l-transport hodisasi, harakat qatnashchisi, qonun, me'yoriy hujjatlar, yo'l tarmoqlari, tirbantlik, tezlik, yo'l sharoitlari, tartibsiz harakat, piyodalar o'tish joylari.

*Yoldoshov K.Q.
doctoral student
Fergana Polytechnic Institute*

MEASURES TO IMPROVE TRAFFIC SAFETY ON CITY STREETS

Abstract. This article describes the organization of traffic safety on highways, the main goals and tasks of traffic organization, and methods of improving measures aimed at increasing road safety.

Key words: traffic, safe traffic, traffic flow, car, driver, road, pedestrian, traffic accident, traffic participant, law, regulations, road networks, traffic jam, speed, road conditions, irregular traffic, pedestrian crossings.

Barchamizga ma'lumki, so'ngi yillarda yurtimizda avtomobilsozlik sanoati yuqori ko'rsatkichlarda rivojlanib, yo'llarda avtotransport vositalarining soni izchil ortib bormoqda. Bu o'z navbatida yo'llardagi harakat havfsizligining tartibga solinishi dolzarb masala ekanligining yorqin ifodasidir. Yo'l harakatini tashkil etish bu transport vositalarini yuqori samaradorlik bilan harakatlanishga qaratilgan tadbirlar tizimi.

- hisobdagi tezlikni ta'minlovchi foydalanish koeffitsient – bitta yengil avtomobilning ta'minlangan yo'lda harakat xavfsizligi, yoki avtomobilning xar bir yo'l uchastkasi bilan o'zaro ta'siri sharoitidagi maksimal tezligini (V_{fmax}), mazkur darajadagi yo'l va joyning rel'efi uchun xisobiy tezlikka (V_r) bo'lgan nisbati:

$$K_{fxt} = \frac{V_{fmax}}{V_p}(1)$$

- hisobiy tezlikni ta'minlanish koeffitsienti – V_{fmax} ning negizoviy hisobiy tezlikka (V_r^b) nisbati:

$$K_{xt} = \frac{V_{fmax}}{V_p^b} \quad (2)$$

bazaviy xisobiy tezlik qilib $V_r^b = 120$ km/s olingan.

Bunda,

$$K_{xt} = \frac{V_{fmax}}{120} \quad (3)$$

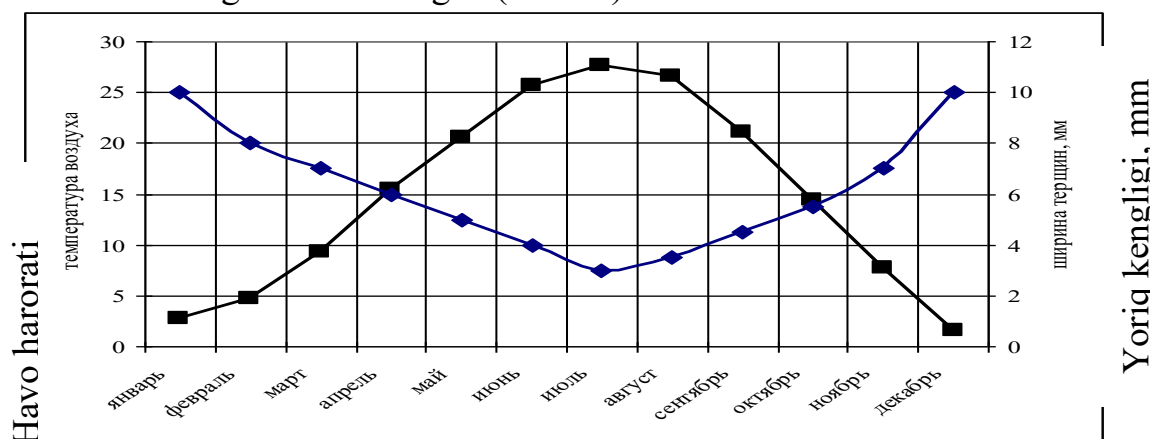
Amaliy xisoblarda xisobiy tezlikni ta'minlanish koeffitsientidan foydalanish qulayroq. ko'rsatilgan koeffitsientlarning nisbatlari quyidagi formulalar bilan aniqlanadi:

$$K_{fxti} = \frac{120 * K_{pi}}{V_{pi}} \quad (4)$$

bu yerda, V_{pi} va K_{fxti} – mazkur darajadagi yo'l uchun mos ravishda xisobiy va xisobiy tezlikni ta'minlash va foydalanish koeffitsienti.

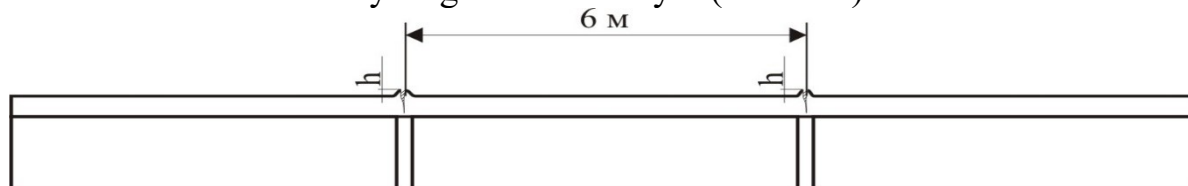
Avtomobil yo'llarini transport-foydalanish sifatlarini 4 turkumga ajratishimiz mumkin: avtomobil xarakatiga bog'liq bo'lgan; yo'l sharoitiga bog'liq bo'lgan; harakat xavfsizligiga; harakat iqtisodiyligiga.

Quyidagi grafikda avtomobil yo'llarida paydo bo'ladigan yoriqlarning ob-havo ta'sirida o'zgarishi keltirilgan (1-rasm).



rasm. Yoriqlarning kengligini havo xarorati ta'sirida o'zgarishi grafigi (boshlang'ich kenglik 5 mm).

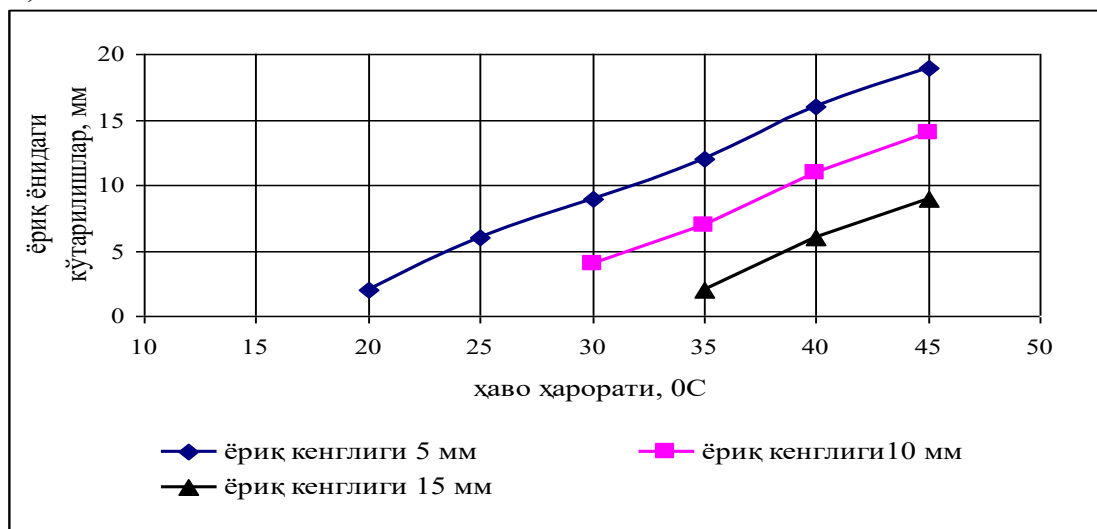
Grafikdan shuni ko'rish mumkinki havo haroratini musbat tomonga o'zgarishi oqibatida yoriq kengligi qisqarib boradi. Bir hisobda bu yo'llar tekis bo'lishini ta'minlash lozim edi. Lekin havo haroratini ortishi qoplamadagi haroratini ikki marotaba ortishiga olib keladi va bunday paytda yoriqlar qisqarib ular ustida ko'tarilishlar yuzaga kela boshlaydi (2 – rasm).



2 – rasm. Sementobeton asosli asfaltobeton qoplamalarida yuzaga keladigan ko'tarilishlarni joylashish sxemasi. Rasmdan shuni taxlil qilish

mumkinki, haroratni ortishi yo‘llarning ravonlik ko‘rsatgichini yomonlashishiga va ortib ketishiga olib ketar ekan.

1 – xolat. Har xil kenglikdagi yoriqlarning harorat ta’sirida o‘zgarishi (3 - rasm).



3 – rasm. Ko‘tarilishlarni havo harorati ta’sirida o‘zgarishi.

Rasm tahlili shuni ko‘rsatadiki, yoriq kengligi qanchalik kichik bo‘lsa ko‘tarish balandligi shuncha katta bo‘ladi.

Demak yoriq kengligi qanchalik kichik bo‘lsa ravonlik qiymati shuncha yuqori bo‘ladi. Bu esa yo‘lning transport-ekspluatatsion sifatlarini payishiga va transport oqim tezlikni kamayishiga buning oqibatida avtomobil yo‘llariga tushadigan kuchni ortib ketishiga olib keladi.

Chiziqli grafikni qurish va yo‘lning umumlashtirilgan sifat ko‘rsatgichini baholash MSHN 05-2005 “Avtomobil yo‘llarini tashxis qilish va baholash qoidasi”ga asosan bajariladi.

Ishlar o‘z ichiga yo‘lning alohida uchastkalarida yo‘lning umumiy sifat ko‘rsatgichlari (K_y), qaysiki TFH hamda uning umumlashtirilgan ko‘rsatgichlari (K_y), muhandislik jihozlari va jihozlanishi ko‘rsatgichi (K_{ob}) va yo‘lning saqlanganlik ko‘rsatgichi (K_e) o‘z ichiga oladi va quyidagi formula orqali aniqlanadi.

$$K_y = KK_y * K_{ob} * K_e(5)$$

bu erda, $KK_y = K_{xt}^{jam} = K_{xt}^{min}$ ko‘rilayotgan yo‘l uchastkasini transport-ekspluatatsion xolatini kompleks ko‘rsatgichi – 10 ta xisobiy tezlikni ta‘minlanganlik xususiy koeffitsientni eng kichik qiymati.

Hisobiy tezlikni ta‘minlanganligi xususiy koeffitsientini haqiqiy qiymati $V_r^b = 120$ km/s teng qilib olingan negizoviy tezlikka nisbatan aniqlanadi hamda yengil avtomobilning ko‘rilayotgan yo‘l uchastkasidagi haqiqiy maksimal tezligini 85% ta‘minlangandagi qiymati. Xulosa o‘rnida shuni ta’kidlab o‘tish joizki, avtomobil yo‘llarida harakat xavfsizligini tashkil etish borasidagi turli chora tadbirlarni tezlik bilan real hayotda amalga oshirish asosiy vazifalardan

hisoblanadi. Ushbu jarayonlar davomida qilinayotgan har bir amaliy va ilmiy asoslangan ishlar harakat xavfsizligini oshishiga, yo‘l transport hodisalarining kamayishiga, yo‘llarda harakatlanishning murakkab bo‘lmasligiga xizmat qilishi lozim.

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*Yuldashev N.A.
Andijon davlat universiteti
Tabiiy fanlar fakulteti
Geografiya kafedrasida o'qituvchisi*

O'ZBEKISTONDA ALOQA XIZMATLARINING SHAKLLANISHI VA RIVOJLANISHI (MOBIL ALOQA XIZMATLARI MISOLIDA)

Annotatsiya. Maqolada xizmat ko'rsatish sohalarining yirik tarmog'i bo'lgan aloqa xizmatlarining shakllanishi va rivojlanishi yoritilgan. Aloqa xizmatlarining O'zbekistonda shakllanish tarixi, rivojlanishi va uning amaliy ahamiyati, shuningdek mamlakat aholisining (mobil aloqa) aloqa xizmatlaridan foydalanishi tadqiq etilgan

Kalit so'zlar: Aloqa, xizmat ko'rsatish, aloqa xizmatlari, mobil aloqa, kosmik aloqa, telegraf aloqa, elektr aloqa

*Yuldashev N.A.
teacher
Department of Geography
Faculty of Natural Sciences
Andijan State University*

FORMATION AND DEVELOPMENT OF COMMUNICATION SERVICES IN UZBEKISTAN (EXAMPLE OF MOBILE COMMUNICATION SERVICES)

Abstract. The article describes the formation and development of communication services, a large network of service industries. The history, development and practical importance of communication services in Uzbekistan, as well as the use of (mobile communication) communication services by the country's population have been studied.

Key words: Communication, service, communication services, mobile communication, space communication, telegraphic communication, electrical communication.

Aloqa – turli vositalar yordamida axborotlarni uzatish va qabul qilish; xalq xo'jaligining pochta, telefon, telegraf, radio, televideniya va boshqalar orqali axborotlarni uzatish va qabul qilishni ta'minlaydigan tarmog'i. Aloqa jamiyatning ishlab chiqarish xo'jalik faoliyatida, davlat, qurolli kuchlar va jami transport turlarini boshqarishda, shuningdek aholining madaniy-maishiy ehtiyojlarini qondirishda muhim ahamiyatga ega.

Qadimda xabarlar bir manzildan ikkinchisiga choparlar, kabutarlar yordamida yetkazilgan, ularni uzatishda shartli signallar – gulxanlar, chiroqlar, har xil ovoz chiqaruvchi asboblar qoʻllanilgan. Keyinchalik xabarlar yozma holda joʻnatiladigan boʻldi, natijada pochta aloqasi paydo boʻldi. Sanoat va savdo taraqqiyotining jadal surʼatlari axborotlarni tez yetkazishga imkoniyat yaratadigan yangi Aloqa usullariga katta ehtiyojni yuzaga keltirdi. XVIII asr oxirida optik aloqa paydo boʻldi, XIX asrda axborotlarni sim orqali katta tezlikda uzatishning elektr usullari kashf etildi. 1832-yilda P. L. Shilling elektr telegrafi yaratdi. 1837-yilda Samuel Morse elektromagnit telegraf apparatini, 1876-yilda Alexander Graham Bell aloqa telefonni kashf etdi. Aloqa taraqqiyotida navbatdagi eng muhim bosqich – aloqa S. Popov tomonidan simsiz aloqa – radioaloqaning yaratilishi boʻldi. Shundan soʻng aloqa vositalarining texnika taraqqiyoti tez surʼatlarda bordi, axborotlarni ishonchli va tez uzatishi, quvvati va liniyalari soni jihatidan katta ustunlikka ega boʻlgan yangi tizimlar paydo boʻldi va keng qoʻllanila boshladi. XX asrning 60–70-yillarida aloqa vositalarining kosmik (Yerning sunʼiy yoʻldoshlari orqali) tizimlari yaratildi.

Qoʻllaniladigan texnika vositalari xarakteriga koʻra aloqa pochta aloqasi va elektr aloqasiga boʻlinadi. Hozirgi davrda aloqa barcha mamlakatlarda iqtisodiyotning eng muhim tarmoqlaridan biri hisoblanadi. Aksariyat rivojlangan mamlakatlarda aloqani rivojlantirish ishlariga yetarli hajmda mablagʻlar sarflanadi.

XX asrning 90-yillarida Oʻzbekistonda rivojlangan aloqa korxonalari aholiga hamda xalq xoʻjaligiga pochta, telegraf mahalliy, shaharlararo, xalqaro telefon aloqa xizmati koʻrsatadi, shuningdek respublikada radioaloqa, radioeshittirish va televideniyaning texnika vositalari bilan taʼminlaydi. Respublikaning aloqa majmuasi pochta, matbuottarqatish, uyali aloqa, elektr aloqa, kosmik yoʻldoshlar orqali aloqa turlarini qamraydi. Oʻzbekiston mustaqillikka erishganidan keyin bozor iqtisodiyotiga oʻtish jarayonida milliy telekommunikatsiya tarmogʻini rivojlantirish va uni mustaqil boshqarish muhim vazifaga aylandi. 1992-yil 13-yanvarda Oʻzbekiston Respublikasining “Aloqa toʻgʻrisida” qonuni qabul qilindi. Pochta aloqasi, axborot tizimlari va telekommunikatsiyalar sohasida boshqaruvni yanada takomillashtirish maqsadlarida 1997-yil 23-iyunda Respublika Aloqa vazirligi Pochta va telekommunikatsiyalar Agentligiga aylantirildi. Agentlik tarkibida aloqaning ishlab chiqarish xoʻjalik, texnologik masalalari bilan shugʻullanadigan “Mahalliy telekom”, “Xalqaro telekom” aksiyadorlik kompaniyalari hamda “Oʻzbekiston pochta” davlat-aksiyadorlik kompaniyasi tashkil etildi. 1992-yili Oʻzbekiston Xalqaro elektr-alloqa ittifoqiga aʼzo boʻlib kirdi. Bu esa Oʻzbekistonning telekommunikatsiya sohasida xalqaro hamkorlik qilishi uchun keng yoʻl ochdi. Oʻzbekistonda aloqa tarmogʻini jahon andozalariga javob beradigan darajaga koʻtarish uchun Xalqaro elektr aloqa ittifoqi muntazam koʻmak berib kelmoqda. 1992-2000-yillarda AQSh, Yaponiya, Germaniya, Indoneziya, Italiya, Malayziya, Buyuk Britaniya, Janubiy Koreya, Turkiya, Xitoy mamlakatlaridagi yetakchi

firmalar bilan O‘zbekistonda elektr aloqa tarmoqlarini rivojlantirish bo‘yicha xalqaro hamkorlik yaxshi samara berdi.

Telegraf aloqa — diskret (harfaqamli) xabarlarini uzoq, masofaga tez uzatish va qabul qilish hamda qabul punktida qayd etish; elektr aloqaning bir turi. Sim orqali uzatiladigan elektr signallar va simsiz radiosignallar orqali, telegraf apparati va fototelegraf (faksimil) apparat yordamida amalga oshiriladi. Telegraf aloqa elektr aloqaning bir turi sifatida XIX asr 30-yillarida paydo bo‘lgan. Axborotlarni uzatishda dastlab (pochta aloqasidan tashqari) yorug‘lik va tovush signallaridan foydalanilgan.¹¹⁵ Rossiyada 1832-yilda P.L. Shilling tomonidan telegraf apparati yaratilishi bilan Telegraf aloqaga asos solindi. So‘ngra B. S. Yakobi tomonidan elektromagnit telegraf apparati (1839) va harf bosish telegraf apparati (1850), S. Morze tomonidan elektromexanik telegraf apparati (1844) yaratilishi Telegraf aloqaning rivojlanishiga yordam berdi. O‘zbekistonda Telegraf aloqa XIX asr oxiriga kelib Toshkent Orenburg telegraf liniyasi ochilishi bilan boshlangan. Hozir “O‘zbektelekom” aksionerlik kompaniyasi telegraf va telefon aloqani tashkil etadi.

Uzatiladigan xabarlarning turiga qarab, Telegraf aloqa umumiy foydalanish, abonent, idora, faksimil xillarga bo‘linadi. Umumiy foydalanish Telegraf aloqasi aloqa korxonalariga keluvchi telegrammalar, pul o‘tkazmalari va boshqalarni uzatish uchun xizmat qiladi. Abonent telegraf yordamida abonentlarning xonalariga bevosita o‘rnatilgan telegraf apparatidan foydalanib muloqotlar olib borish mumkin. Idora Telegraf aloqasi ko‘plab hujjatli xabarlar uzatish va qabul qilishni talab qiladigan xalq xo‘jaligi tarmoqlari (temir yo‘l, transport, fuqaro aviatsiyasi va boshqalar)da tashkil etiladi.

Kosmik aloqa — Yer sun‘iy yo‘ldoshlari orqali yerdagi punktlar orasida yoki kosmik apparatlar orasidagi aloqa. Yerdagi punkt bilan kosmosdagi inson o‘rtasida aloqa birinchi marta 1961-yilda Yu.A.Gagarin “Vostok” kosmik kemasida parvoz kilganda o‘rnatildi. Kosmosda, asosan, radioaloqa, ba‘zan, optik aloqa qo‘llaniladi.¹¹⁶ Kosmik aloqa tizimida ko‘proq radioaloqadan, Yerdagi punktlar orasida aloqa bog‘lash uchun elliptik va doiraviy statsionar orbitalar bo‘yicha harakatlanuvchi YESY dan foydalaniladi. Kosmik apparatlar orasida Kosmik aloqa birinchi marta 1962-yilda “Vostok-3” va “Vostok-4” kemalari orasida amalga oshirilgan. Yerdagi punktlar orasida Kosmik aloqa o‘rnatish uchun kuchli antennalar, radioshovqin darajasi juda kichik bo‘lgan qabul qiluvchi asboblari, qidirilayotgan signalni ajratib oladigan maxsus apparatlardan foydalaniladi. Kosmik apparatning bort apparaturalari juda puxta, yengil va ixcham bo‘lishi kerak. Kosmik aloqa kanallari uchun ularning vazifasi va yo‘nalishlariga ko‘ra turlicha chastota dia-pazonidan foydalaniladi. Chastotalarni taqsimlash va ulardan foydalanish tartibi radioaloqa reglamenti bilan belgilanadi. Kosmik aloqa tizimlarining Yerdagi aloqa tizimlaridan asosiy farqi Kosmik apparat vaziyatining uzluksiz o‘zgarib turishi, Kosmik apparatning har ondagi

¹¹⁵ O‘zbekiston milliy ensiklopediyasi. Birinchi jild. Toshkent, 2000-yil.

¹¹⁶ O‘zbekiston milliy ensiklopediyasi. Birinchi jild. Toshkent, 2000-yil.

koordinatalarini bilish zarurligi, qabul qilinayotgan signallar chastotasining tez-tez o'zgarib turishi, Kosmik apparat bortidagi radiouzatkichlar quvvatining cheklanganligi, masofaning uzoqligi va boshqalardan iborat.

Yer bilan Kosmik apparat orasidagi aloqa yordamida kosmovideniya asos solinadi, natijada insoniyat odamning ochiq kosmosga chiqishi va Oyda yurishining shohidi bo'ldi. Sayyoralararo avtomatik st-yalar Venera va Marsga uchirilganda 350 mln. km masofa

da ikki tomonlama turg'un radioaloqa o'rnatildi. "Mars" va "Mariner" tipidagi kosmik stansiyalarga o'rnatilgan apparatlar yordamida Mars va Venera sayyoralarining atrofi, atmosferasi, temperaturasi tekshirildi va telemetrik kanallar orqali tasvirlari Yerga uzatildi.

Elektr aloqa — axborotlar (nutq, harfraqamlar, tasvir va boshqalar) sim yoki radiosignallar orqali elektr signallari tarzida hamda optik aloqa tizimi yordamida uzatiladigan aloqa. Signallarni uzatish usuliga qarab, simli aloqa va radio aloqa; uzatiladigan axborotlarning turiga qarab, telefon aloqa, telegraf aloqa, faksimil aloqa, bir vaqtning o'zida nutqiy va tasviriy axborotlarni saqlaydigan va uzatadigan videotelefon aloqa va boshqalarga bo'linadi. Uzatuvchi va qabul qiluvchi punktlar orasida Elektr aloqa o'rnatish uchun uzatuvchi va qabul qiluvchi apparatlar, aloqa kanali, kommutatsiya tizimi qurilmalari qo'llanadi. Uzatuvchi apparat signallar (nutqlar, telegramma matni belgilari, perforatsion lentalar yozilgan belgilar va boshqalar)ni elektr signallariga aylantiradi.

Mobil aloqa — telefon apparati yordamida abonentlar o'rtasida tovushli aloqa bog'lashga imkon beradigan elektr aloqa vositasi. Telefon tarmoqlari orqali amalga oshiriladi, amalda istalgan masofa orasida, yer yuzidagi istalgan joy o'rtasida tovushli aloqa o'rnatishga imkon beradi.¹¹⁷ Shotland ixtirochisi A.G.Bell 1876-yilda birinchi elektrakustik qurilma — telefon ixtiro qilganidan hamda AQSH (NyuXeyven) da 1878-yilda birinchi telefon stansiya qurilganidan keyin telefon aloqa tarmog'i shakllangan. Amerikalik ixtirochi T.A.Edison (1847—1931) ko'p yillar mobaynida Telefon aloqani takomillashtirishga doir ishlar olib bordi. Birinchi oddiy ATS loyihasini rus ixtirochisi K. Mossitskiy 1887-yilda taklif qildi. Murakkab ATS loyihasini 1893-yilda rus olimi M.F.Freydenberg ishlab chiqdi. Birinchi xalqaro telefon liniyasi (Moskva — Peterburg) 1908-yilda ochildi, 1939-yilda dunyoda eng uzun ko'p karrali Telefon aloqa liniyasi (Moskva — Xabarovsk) ishga tushdi. O'zbekistonda (Toshkentda) Telefon aloqa 1887-yil ishlay boshlagan, 1914-yil Toshkent sh. telefon tarmog'i ishga tushgan. Respublikada dastlabki telefon stansiyalar 1929-yil qurilgan, birinchi ATS 1932-yil ishga tushirilgan, Koordinat ATS 1974-yil paydo bo'lgan. Dastlabki shaharlararo Telefon aloqa Toshkent — Samarqand, Samarqand — Qo'qon, Toshkent — Piskent, Toshkent — To'ytepa liniyasida 1924-yil ochildi. XX asr

¹¹⁷ O'zbekiston milliy ensiklopediyasi. Birinchi jild. Toshkent, 2000-yil.

60-yillaridan havo aloqa liniyalari astasekin yer osti kabellariga o'tkazildi. Toshkentda dastlabki telefonavtomatlar (taksofonlar) 1935-yildan o'rnatila boshlandi, birin-ketin boshqa yirik shaharlarda ham ishga tushdi. XX asr 90-yillaridan raqamli va uyali telefon tizimi paydo bo'ldi. Hozir respublika va jahonning barcha shaharlari bilan aloqa o'rnatishga imkon beradigan xalqaro telefonavtomatlar mavjud. Respublikamizdagi barcha shaharlar orasida va xalqaro Telefon aloqa yo'lga qo'yilgan. Respublikada Telefon aloqaga doir barcha ishlar "O'zbektelekom" AK tarmoqlari orqali amalga oshiriladi.

Mamlakatimizda raqamli iqtisodiyotni faol rivojlantirish, barcha tarmoqlar va sohalarda, eng avvalo, davlat boshqaruvi, ta'lim, sog'liqni saqlash va qishloq xo'jaligida zamonaviy axborot-kommunikatsiya texnologiyalarini keng joriy etish bo'yicha kompleks chora-tadbirlar amalga oshirilmoqda.

Xususan, elektron hukumat tizimini takomillashtirish, dasturiy mahsulotlar va axborot texnologiyalarining mahalliy bozorini yanada rivojlantirish, respublikaning barcha hududlarida IT-parklarni tashkil etish, shuningdek, sohani malakali kadrlar bilan ta'minlashni ko'zda tutuvchi 220 dan ortiq ustuvor loyihalarni amalga oshirish boshlangan. Bundan tashqari, 40 dan ortiq axborot tizimlari bilan integratsiyalashgan geoportalni ishga tushirish, jamoat transporti va kommunal infratuzilmani boshqarishning axborot tizimini yaratish, ijtimoiy sohani raqamlashtirish va keyinchalik ushbu tajribani boshqa hududlarda joriy qilishni nazarda tutuvchi "Raqamli O'zbekiston" kompleks dasturi amalga oshirilmoqda.¹¹⁸

Mabil aloqa tarmoqlarini jadal sur'atlar bilan rivojlanishi va takomillashtirilishi natijasida O'zbekiston Broadband Genie tomonidan tuzilgan Mobil ma'lumotlarni narxlarining arzon yoki qimmatligi indeksida¹¹⁹ 179 ta davlat o'rtasida o'rtacha oylik va kamida 10Gb internet ishlatish ushbu oylikni qancha qismiga to'g'ri kelishi tahlil qilingan. O'zbekiston ushbu ko'rsatkich bo'yicha Markaziy Osiyo davlatlari orasida eng yaxshi va dunyoda 43-o'rinni egalladi. Ushbu jadvalni 10Gb internetni ishlatish narxi (Mobile data cost) bo'yicha tahlil qilinganda ushbu ko'rsatkichda O'zbekiston dunyoda 5-o'rinda eng arzon mobil internetga ega davlat sifatida ko'rsatilgan.

Xulosa qilib aytish mumkinki, insonyat tarqqiyoti davomida har doim aloqa xizmatlaridan foydalangan, hozirgi kunga kelib axborot almashinish jarayonida mobil aloqa tarmog'i eng qulay tarmoqqa aylanib ulgurdi. Broadband Genie tomonidan tuzilgan jadval ma'lumotlarini tahlil qilinganda, O'zbekiston eng arzon internetga ega ekanligi va bu sohada ilmiy izlanish davom etayotganligi ko'rinib turibdi. Hozirda respublikaning barcha hududlarida mabil aloqa xizmatlarini ko'rsatishni takomillashtirish uchun keng ko'lamlı ishlar amalga oshirilmoqda, jumladan yangi antennalarning o'rnatilishi, o'rnatilganlarini esa rekonstruksiya qilinishi natijasida mabil aloqa internet sifati yaxshilandi. Yaqin

¹¹⁸ "Raqamli O'zbekiston — 2030" strategiyasini tasdiqlash va uni samarali amalga oshirish chora-tadbirlari to'g'risida

¹¹⁹ <https://www.broadbandgenie.co.uk/mobile-data-world-affordability>

kelajakda mabil aloqa xizmatlarini ko'rsatish uchun respublikaning barcha hududlarida 5G internet tarmog'ining ishga tushurilishi tarmoqda yangi yirik qadam bo'ladi va bu orqali mabil aloqa xizmatlarini ko'rsatish yanada rivojlanadi.

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*Ziyayev Sh.A.
Qo‘qon davlat pedagogika instituti
tayanch doktoranti*

BO‘LAJAK INFORMATIKA FANI O‘QITUVCHILARINING KASBIY TAYYORGARLIGINI RIVOJLANTIRISHDA XORIJIY TAJRIBALAR

Annotatsiya. Dunyoning turli mamlakatlarida ta’lim tizimini rivojlantirishning strategik yo‘nalishi shaxsga yo‘naltirilgan ta’lim muammosini hal qilish yo‘lidan iborat. Ushbu maqolada bo‘lajak informatika fani o‘qituvchisini kasbiy tayyorgarligini rivojlantirishda xorijiy tajribalar bo‘yicha nazariy asoslangan yondashuvlarini umumiy tahlili bayon qilingan.

Kalit so‘zlar: innovatsion fikrlash, pedagogik kompetentlik, uzluksiz, integrativ yondashuv, ko‘nikmalar va malakalar, pedagogik faoliyat, kompetensiya.

*Ziyayev Sh.A.
PhD candidate
Kokand State Pedagogical Institute*

FOREIGN EXPERIENCES IN DEVELOPING PROFESSIONAL TRAINING OF FUTURE IT TEACHERS

Annotation. The strategic direction of the development of the education system in different countries of the world is the way to solve the problem of person-oriented education. In this article, a general analysis of theoretically based approaches to the development of professional training of future informatics teachers based on foreign experiences is described.

Key words: innovative thinking, pedagogical competence, continuous, integrative approach, skills and competencies, pedagogical activity, competence.

Informatika o‘qituvchilarini tayyorlash pedagogik ta’lim tizimida amalga oshiriladi, bu esa o‘z navbatida maktab va oliy ta’lim tizimi bilan uzviy bog‘liqdir. Shuning uchun chet elda informatika o‘qituvchilarini tayyorlash tahlili ushbu mamlakatlarning ta’lim tizimini tashkil etish va ularning pedagogik ta’limining umumiy masalalarini o‘z ichiga olishi kerak, bu esa informatika o‘qituvchilarini tayyorlashni tashkil etishni yaxshiroq tushunish imkonini beradi.

Mamlakat taraqqiyoti aholi ta’lim darajasining o‘shishiga tobora ko‘proq bog‘liqligini anglash ko‘plab xorijiy mamlakatlarni xususiy ta’limga katta e’tibor qaratuvchi “Ta’lim barcha uchun” global dasturini qabul qilishga majbur qildi, bu mamlakatlarning xususiy ta’lim dasturlarini rivojlantirishga qaratilgan, ular o‘quvchilarning rivojlanishiga, ularning qiziqishlari va moyilliklarini hisobga olish uchun shart-sharoit yaratishga, ta’lim ehtiyojlarini qondirishga katta e’tibor

beradilar. Xorijiy mamlakatlar ta'lim tizimidagi o'zgarishlar shaxsga yo'naltirilgan ta'lim metodikasining rivojlanishi tufayli pedagog kadrlarni, jumladan, informatika o'qituvchilarini tayyorlash va qayta tayyorlash tizimlarini takomillashtirishga olib keldi.

Xorijda zamonaviy o'qituvchini tayyorlashdan maqsad katta ijodiy salohiyatga ega bo'lgan, uni o'quvchi shaxsi, uning bilim va ijodiy qobiliyatlarini o'rganish va rivojlantirish jarayonida o'quvchi – shaxs va fuqaroning manfaatlaridan kelib chiqqan holda amalga oshira oladigan insonparvar o'qituvchini shakllantirishdan iborat. Pedagog kadrlar tayyorlash maqsadlarining o'zgarishi o'quv rejalari va dasturlarida, o'qitish tuzilmasida, shaxsga yo'naltirilgan ta'limni amalga oshirishga yordam beruvchi pedagogik texnologiyalar va metodikalarda o'z ifodasini topadi.

Quyida AQSh, Buyuk Britaniya, Germaniya va Polsha kabi mamlakatlarda informatika o'qituvchilarini tayyorlash tajribasi tahlil qilingan. Bu tutash nuqtalarni aniqlash, informatika o'qituvchilarini tayyorlashni tashkil etishga yondashuvlarning umumiyliigi va farqlarni aniqlashga imkon beradi, bu ayniqsa Boloniya jarayonida dunyoda ko'proq tan olinayotgan "Umumavropa bilimlar uyi" konsepsiyasi doirasida muhim ahamiyatga ega. Rivojlangan xorijiy mamlakatlardagi pedagogik ta'lim tizimlarida informatika o'qituvchilarini tayyorlash tajribasini nazariy jihatdan umumlashtirish ushbu tajribadan Rossiyada aniqlangan tendensiyalar asosida informatika o'qituvchilarini tayyorlashni rivojlantirish imkonini beradi.

Xorijda informatika fani o'qituvchilarini tayyorlash masalasini ko'rib chiqishdan oldin shuni ta'kidlash kerakki, xorijiy manbalardan olingan ma'lumotlarni tarjima qilish va tahlil qilish jarayonida hisobga olingan terminologik xususiyatlar mavjud. AQSh va boshqa ba'zi mamlakatlarda informatika o'qituvchisi Axborot texnologiyalari (Information Technology) o'qituvchisi yoki texnologiya (Technology) o'qituvchisi, Irlandiyada informatika o'qituvchisi AKT o'qituvchisi (ICT) deb ataladi.[3]

Ushbu maqolada o'qituvchilar uchun o'quv, ijtimoiy va kasbiy qo'llab-quvvatlash tizimini rivojlantirish istiqbollari belgilashda mamlakatimiz uchun ham, umuman jahon hamjamiyati uchun ham katta qiziqish uyg'otayotgan informatika fanlari bo'yicha o'qituvchilarga bo'lgan ehtiyojlarni o'rganish asosida pedagog xodimlarni tayyorlash va ular bilan samarali ishlash tufayli yuqori pedagogik ta'lim jarayonlariga erishgan mamlakatlar tajribasi tahlil etiladi. Ma'lumki, hozirgi kunda mamlakatimizda ta'lim tizimini, xususan, pedagogikani jamiyatning yangi talablariga muvofiq, tez o'zgaruvchan ijtimoiy-iqtisodiy shart-sharoitlar, umuman ta'lim paradigmasining o'zgarishi bilan isloh qilishga katta ahamiyat berilmoqda.

Buyuk Britaniyada informatika o'qituvchilarini tayyorlash ta'lim tizimiga muvofiq tashkil etilgan, bunda o'qituvchilarga oliy ta'limning barcha bosqichlaridan o'tish imkoniyati berilgan.[3]

Buyuk Britaniyadagi boshlang'ich maktablar uchun informatika o'qituvchilarini tayyorlash Ta'lim kollejlarda amalga oshiriladi, bu yerda o'quvchilar 3 yillik ta'lim bakalavri (Bachelors Degree) darajasini oladilar. Har bir ta'lim kolleji ilmiy daraja beruvchi universitet bilan bog'langan yoki unga aloqador. O'rta maktab o'qituvchilarini tayyorlash ham ushbu kollejlarning ayrimlarida amalga oshiriladi. O'qituvchilarni (va boshqa mutaxassislarini) tayyorlash bo'yicha eng mashhur oliy ta'lim muassasasi Irlandiyadagi Limerik universiteti (University of Limerick) bo'lib, u yerda o'quvchilar to'rt yillik o'quv dasturini tamomlaydi va ilmiy daraja oladi.

Buyuk Britaniyada informatika o'qituvchilarini tayyorlash ham uzluksizdir. Bir necha o'n yillar oldin ta'lim olgan ko'plab o'qituvchilar uchun Angliya Milliy O'qituvchilar Ittifoqi (NUT) "O'qituvchilar uchun axborot - kommunikatsiya texnologiyalari" kurslarini tashkil qilgan. Ushbu kurslarni tugatgandan so'ng, mamlakat bo'ylab minglab o'qituvchilar darsda AKTdan foydalanish sohasida o'z kasbiy mahoratini oshirishga muvaffaq bo'ldilar.[4]

Buyuk Britaniyada informatika o'qituvchilarini tayyorlash tahlili, uni rivojlantirishning aniqlangan tendensiyalari asosida shunday xulosaga kelish mumkinki, Buyuk Britaniyada informatika o'qituvchilarini tayyorlash tizimi kasbiy va shaxsiy rivojlanishning turli usullarini ta'minlaydi, ta'lim jarayoni o'zgaruvchanligini ta'minlaydi, o'qituvchilarning shaxsga yo'naltirilgan yondashuv elementlari bo'lgan o'z-o'ziga o'rgatish qobiliyatini shakllantirish uchun sharoit yaratadi; kadrlar tayyorlash tizimida informatika fanining rivojlanishiga, axborotlashtirish jarayoniga, o'qituvchilarning kasbiy qiziqishlariga mos ravishda dasturlar doimiy ravishda tuzatilib, o'zgartirilib boriladi, o'qitish jarayonida bo'lajak o'qituvchilarning shaxsini o'z-o'ziga o'rganish va o'z-o'zini rivojlantirish jarayonlarni jadallashtirish uchun shart-sharoitlarni ta'minlaydigan rivojlantiruvchi ta'lim metodlarini ishlab chiqishda foydalaniladi, bu sinergik yondashuvning elementlari hisoblanadi.[3]

Shunday qilib, Buyuk Britaniya informatika va AKT bo'yicha o'qituvchilar tayyorlashning rivojlanish tahlili quyidagi tendensiyalarni aniqlash imkonini berdi:

- pedagog kadrlar tayyorlash holati monitoringini joriy etish, uning natijalari asosida bo'lajak o'qituvchilarni tayyorlash dasturlari, malaka oshirish kurslari, pedagogik ta'limni tashkil etishdagi tarkibiy o'zgarishlar, pedagogika oliy ta'lim muassasalarining oliy ta'lim muassasalari bilan birlashishi, pedagogik kadrlar tayyorlashning yangi modellarini ishlab chiqish hisobiga, informatika o'qituvchilarini tayyorlash sifati yaxshilanadi;

- fanlardan tayyorlashni chuqurlashtirish va kengaytirish hisobiga (informatika yo'nalishi bo'yicha o'qitish mazmuni multimedia tizimlari va vositalari, masofaviy ta'lim vositalari va boshqalar kabi yangi mavzular bilan to'ldirildi; ta'limni axborotlashtirish sohasida kadrlar tayyorlash takomillashtirildi - yagona axborot ta'lim makonidan foydalanish, multimedia didaktik vositalarining predmet bazalari, o'quv serverlari va platformalari,

masofaviy ta'limdan foydalanish asosida ta'lim jarayonida AKTdan foydalanishning yangi usullari o'rganildi), informatika fanini o'qitish metodikasi sohasida o'qituvchilarining malakasini oshirishni kengaytirish orqali informatika o'qituvchilarini tayyorlash dasturlari takomillashtirildi;

O'tkazilgan tahlillar va aniqlangan tendensiyalar Buyuk Britaniyada informatika o'qituvchilarini tayyorlash tizimlarida shaxsga yo'naltirilgan va sinergetik yondashuvlarni qo'llashning alohida yo'nalishlari mavjud, degan xulosaga kelish imkonini beradi.

Bo'lajak informatika o'qituvchisining kasbiy tayyorgarligi malakasini oshirish jarayonida uzluksiz kasbiy tayyorgarligini rivojlantirishda *tizimli, shaxsga yo'naltirilgan, sinergetik, kompetentli, faoliyatli va andragogik yondashuvlar* tanlab olindi. Mazkur yondashuvlar informatika o'qituvchilarini kasbiy tayyorgarligini rivojlantirishga xizmat qiladi;

Shaxsga yo'naltirilgan va sinergetik yondashuvlar informatika o'qituvchilarining uzluksiz kasbiy tayyorgarligi metodologiyasi va amaliyotining bir qismidir, u bir vaqtning o'zida ta'lim maqsadlaridan biri bo'lishi-o'qituvchilarning kelajakdagi kasbiy faoliyatida ushbu yondashuvlarni qo'llashga tayyorligini shakllantirishi kerak;

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Zufarova N.N., Ph.D
2 nd year doctoral student
Tashkent University of Information
Technologies named after Mukhammad al-Khorazmi

METHODS AND ALGORITHM OF CONTROL OF OPTICAL COMMUNICATION NETWORKS

Abstract. The main trends in the development of modern long-distance backbone optical systems are considered. This is, first of all, the complication of signal modulation formats, an increase in the symbol rate in the optical path, the use of superchannels and the formation of the signal spectrum, spectrum management (FlexGrid), the development of amplifiers in new spectral ranges, and the study of low-mode and multi-core optical fibers. It has been shown that existing technologies theoretically make it possible to achieve a throughput of about 100 Tbit/s over a single fiber. Further increases in capacity require the use of new spectral bands or spatial multiplexing using new types of optical fibers.

Keywords: DWDM, coherent reception, fiber optic communication network, modulation format, spectral efficiency, spectrum shaping, spectrum management, FlexGrid, symbol rate.

INTRODUCTION

The needs for traffic transmission are constantly growing, which creates a demand for increasing the performance of long-distance optical systems [1]. At the end of the 2000s, the first commercial coherent systems 40G and 100G were created; in 2013-2014, there was a large-scale transition of the world's largest telecom operators to coherent 100G channels as the main type of backbone channels (in Infinera terminology - optical reboot - optical reboot). A 100 Gbps channel in terrestrial DWDM systems is typically transmitted in the 50 GHz band (spectral efficiency $SE = 100/50 = 2$ bps/Hz).

In 2015, the first commercial optical units were created, providing 200 Gbit/s transmission over a single carrier in the 50 GHz band. By the beginning of 2016, all leading manufacturers had already presented such units, including Acacia, ClariPhy, NEL. The spectral efficiency of these types of optical units is 4 bit/s/Hz, which is twice as high as that of 100G systems. At the beginning of 2017, optical units with a speed of 400 Gbit/s over one carrier are expected to appear.

Thus, the capacity of existing DWDM communication systems over a single fiber is 9.6 Tbit/s in the C-band (96 100G channels), and 27 Tbit/s (270 100G channels) in the extended C+L-band. When moving to systems with $SE = 4$ bit/s/Hz, the maximum capacity increases accordingly to 19.2 or 54 Tbit/s. According to existing theoretical estimates, a 400G channel can also be transmitted in the 50 GHz band ($SE = 8$), which theoretically will allow achieving a capacity of 100 Tbit/s in a single fiber in the C+L-band (270 400G channels).

MATERIALS AND METHODS

In practice, the use of an extended spectral range (C+L), as well as an increase in spectral efficiency, requires solving a number of technological problems. In this regard, today there is active research into technologies that will increase the speed of long-distance optical systems. To continue the sustainable development of long-distance optical systems, it is vital not only to develop existing technologies and approaches, but also to search for new physical ideas and principles, with the use of which breakthrough technologies of the next generation will be created.

The main scientific and technological problems that scientists and engineers around the world are currently actively working on can be divided into four groups [2]:

1. Improving coherent communication systems:
 - multi-level modulation formats;
 - increasing the symbol rate of transmitters and receivers;
 - superchannels and spectral engineering;
 - use of photonic integrated circuits in transponders;
 - software-reconfigurable networks.
2. Improving signal processing methods in coherent communication systems:
 - compensation of distortions during digital signal processing;
 - development of error correction algorithms.
3. Improving methods of amplification and regeneration of optical signals:
 - the use of distributed amplifiers and amplifiers with remote pumping;
 - use of currently unused spectral ranges;
 - optical regeneration.
4. New infrastructure of fiber-optic communication networks:
 - special fibers with reduced nonlinearity;
 - fibers with low physical delay;
 - spatial multiplexing methods: multi-core and few-mode fibers.

RESULTS AND DISCUSSION

Coherent communication systems allow the use of all four degrees of freedom of the electromagnetic field: amplitude and phase (or two quadratures) in each of the two polarizations. This allows, for example, in the DP-QPSK format (dual polarization – quater phase shift keying) to transmit 4 bits per symbol using only one power level. Accordingly, the transition to coherent detection makes it possible to increase the information transmission rate without increasing the symbol rate, i.e. without changing the currently accepted frequency grid (50 GHz) in wavelength multiplexing.

Thus, the transition from direct detection to coherent detection in the new generation of communication systems is natural. It allows you to increase the volume of transmitted information using spectral and polarization multiplexing of channels, as well as spectral-efficient modulation formats, in particular the DP-

QPSK format. It is no coincidence that literally over the last few years, power modulation systems (PMS) operating at a repetition rate of 10 Gbit/s have been replaced by coherent modulation formats at repetition rates of 40 and 100 Gbit/s [2–4].

The structure of the optical signal in the DP-QPSK format is shown in Fig. 1. The signal contains two information components in the QPSK format on orthogonal polarizations. This means that polarization multiplexing is carried out (see Fig. 1, a), therefore, to denote this format, along with the abbreviation DP-QPSK, the abbreviation PM-QPSK is used, i.e. polarization multiplexed QPSK. In turn, each of two orthogonally polarized signals in the QPSK format can be represented as a combination of two binary phase BPSK signals, phase shifted by $\pi/2$ (see Fig. 1, b).

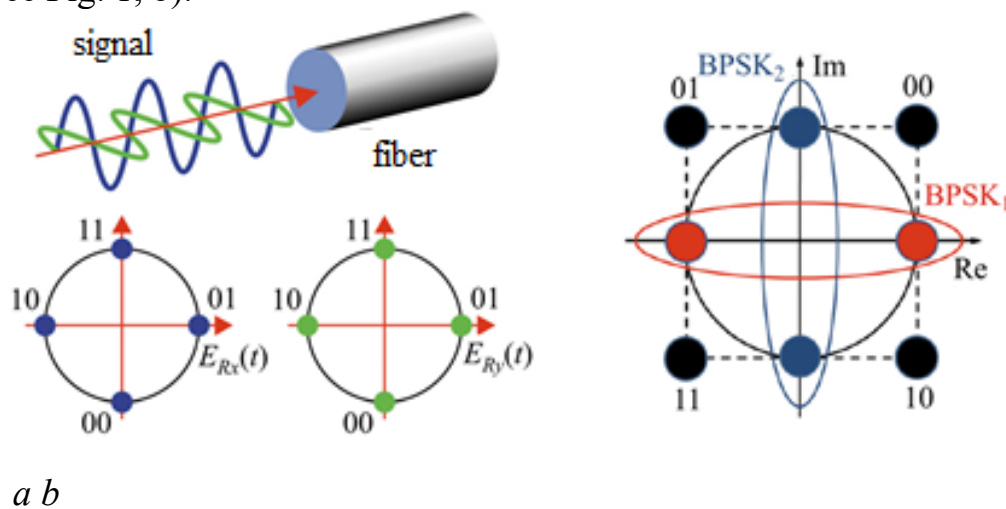


Fig. 1. Optical signal structure in DP-QPSK format:
a – polarization multiplexing of two signals in QPSK format; b – QPSK signal structure

Multi-level modulation formats. Further development of fiber-optic communication systems, as can be seen from the trends of 2014–2015, will most likely be based on the use of more complex modulation formats (DP-16QAM, DP-64QAM, etc.) [5], which make it possible to significantly increase the spectral efficiency and, accordingly, the speed in the bandwidth familiar to the operator. However, the complication of the structure of the modulation format inevitably leads to a significant decrease in the transmission range.

CONCLUSION

In the coming years, progress in increasing the performance of communication systems will be based on the introduction and improvement of spectrally efficient modulation formats in combination with coherent detection and digital signal processing. In the future, apparently, the priority areas for the development of backbone communication systems will be the expansion of the used spectral range, the integration of photonics and electronics, the development of multimode and multi-core fibers and corresponding optical amplifiers.

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*Абдуганиев О.И., доктор географических наук
доцент
кафедра географии
Ферганский государственный университет
Косимов Д.Б.
преподаватель
кафедра ботаники, биотехнологии и экологии
Ферганский государственный университет*

РОЛЬ И ЗНАЧЕНИЕ СИСТЕМЫ ОХРАНЯЕМЫХ ПРИРОДНЫХ ТЕРРИТОРИЙ В ФОРМИРОВАНИИ ЭКОЛОГИЧЕСКОГО КАРКАСА

Аннотация. В данной статье рассматриваются создание экологического каркаса, одной из наиболее эффективных форм природопользования и использования. Также проанализирована понятие экологического каркаса и его элементов.

Ключевые слова: экологическое каркас охраняемые природные территории, биологическая разнообразия, устойчивое развитие, экосистема, геоэкология.

*Abduganiev O.I., doctor of geographical sciences
associate professor
Department of Geography
Fergana State University
Kosimov D.B.
teacher
Department of Botany, Biotechnology and Ecology
Fergana State University*

THE ROLE AND IMPORTANCE OF THE SYSTEM OF PROTECTED NATURAL AREAS IN THE FORMATION OF AN ECOLOGICAL NETWORK

Abstract. This article considers the creation of an ecological framework, one of the most effective forms of nature use and use. Also, the concept of the ecological framework and its elements is analyzed.

Keywords: Ecological framework, protected natural areas, representativeness, biological diversity, sustainable development, optimization, ecosystem, geoecology.

ВВЕДЕНИЕ. Деграция биологического и ландшафтного разнообразия в глобальном масштабе становится как серьезная угроза для

среды обитания человека и снабжения жизненно важными ресурсами. Несмотря на установление ряда политических и экономических обязательств, сосредоточенных на предотвращение деградации биологических видов и природных ландшафтов на международном уровне, снижение качества и количества БЛР все ещё продолжается. Особенно, цели и задачи стратегического плана Айти, который был предусмотрен на 2010-2020 годы, не были реализованы во всех странах одинаково. В целях предотвращения и борьбы с этими проблемами международными организациями, в том числе Саммитом ООН по биоразнообразию, выдвинуты задачи по «присвоению статуса охраняемых природных территорий не менее 30% поверхности Земли к 2030 году»¹²⁰.

В мире ведутся научно-исследовательские работы по совершенствованию системы охраняемых природных территорий, в том числе по следующим приоритетным направлениям: создание глобальных экологических сетей и обеспечение их репрезентативности; восстановление деградированных ландшафтов и сохранение в них уникальных биологических видов; присвоение охранного статуса водно-болотным угодьям международного значения, особенно, местам обитания водоплавающих птиц; расширение системы существующих охраняемых природных территорий и использование их в целях экотуризма; создание трансграничных охраняемых природных территорий и др.

Основные критерии и принципы организации системы ОПТ были разработаны в Конвенции «О биологическом разнообразии» (1992) и «Пан-Европейской стратегии (1995). Впервые «Пан-Европейской стратегии» было заявлено о создании системы экологических сетей (ЭКОНЕТ) по всему миру, на основании которой в Европейском Союзе был создан «Зеленый пояс Европы», объединяющий около 3200 ОПТ из 24 государств. В этой связи подходы и критерии, используемые при формировании системы ОПТ в глобальном масштабе, особенно на региональном уровне, нельзя считать удовлетворительными.

МЕТОДЫ ИССЛЕДОВАНИЯ. В настоящее время всемирная система ОПТ состоит из различных географически и функционально размещенных объектов и территорий, и такие всеобъемлющие экологические сети характеризуются тем, что они не в состоянии осуществить поставленные в перспективе задачи, то есть поддерживать биологическое и ландшафтное разнообразие (БЛР) и обеспечить экологический баланс окружающей среды. Сегодняшние подходы к наименованию, размеру, составу, структуре и организации системы ОПТ нельзя назвать идеальными. Поэтому важно определить научное объяснение понятий, связанных с ОПТ, и излагать теоретический подход и

¹²⁰Генеральная Ассамблея ООН 75-я сессия. Саммит по биоразнообразию. 30 сентября 2020 года. <https://www.un.org/ru/ga/75/meetings/>.

приоритетные аспекты, которые могут стать методологической основой для организации их системы.

Исследования по вопросам создания и совершенствования системы охраняемых природных территорий, составляющих основу экологических сетей, проводили многие известные ученые, такие как R.H.MacArthur, E.O.Wilson, N.T.Bishoff, K.Sepp, I.M.Bouwma, R.H.G.Jongman, G.Bennett, L.Miklós, Н.Ф.Реймерс, Ф.Р.Штильмарк, Б.Б.Родоман, А.А.Чибилёв, А.А.Тишков, Б.И.Кочуров, Н.А.Соболев, З.Г.Мирзаханова, Н.В.Стойцева, А.А.Рафиков, О.В.Зуева, И.Абдуганиев, Ю.И.Ахмадалиев, Ш.М.Шарипов, О.И.Абдуганиев и др. В исследованиях выше отмеченных ученых изучены создание экологических сетей, оценка общего экологического состояния государств и регионов, охрана биологического и ландшафтного разнообразия, освещена сущность ландшафтного, биогеографического, системного и комплексно-географического подходов к оценке экологической ситуации регионов.

В статье исследовании использованы такие методы, как полевые исследования, картографический, ГИС-технологии, ландшафтно-индикационный, маршрутно-экспедиционный, математический анализ, статистический, системный и сравнительный анализ, исторический, классификационный.

Результаты и обсуждение. На международном уровне прогресс системы ОПТ координируется такими организациями, как WCSA, IUCN и WWF. Международными организациями уделяется особое внимание объединению ОПТ в интегрированную систему и совершенствованию управления ими в глобальном масштабе. Отношения в области создания, охраны и использования ОПТ в нашей республике регулируются Законом Республики Узбекистан «Об охраняемых природных территориях» (2004) и другими нормативно-правовыми актами. В статье 4 данного Закона отмечается, что «Охраняемые природные территории составляют единую экологическую систему, предназначенную для обеспечения биологического, ландшафтного разнообразия и поддержания экологического равновесия». Также, исходя из требований Конвенции о биологическом разнообразии в Республике Узбекистан, принят новый Стратегический план¹²¹ по сохранению биологического разнообразия в Республике Узбекистан на период 2019-2028 годы. В данном Стратегическом плане один из самых надежных способов восстановления и сохранения БЛР, обеспечения экологической безопасности и стабильности, адаптации к процессам глобального изменения климата является производство системы ОПТ.

По мнению О.И.Абдуганиева система ОПТ – это комплекс структурно-функционально связанных между собой по определенному

¹²¹Постановление Кабинета Министров Республики Узбекистан № 484 от 11 июня 2019 года.

назначению и функциям, которые имеют разные категории и режимы охраны, и должны сохранить и поддерживать рациональное использование БЛР, улучшить до уровня экологических каркасов, способных обеспечивающие экологическое равновесие и устойчивое развитие. Система ОПТ должна быть создана таким образом, чтобы она сохраняла БЛР в природе, целостность и взаимосвязь, норму в процессе обмена веществом и энергией. Каждый элемент системы должен иметь возможность получать и передавать «информацию» в процессе обмена веществом и энергией в природе. Это, также приводит к специализации категорий и типов ОПТ, которые формируют основу экологического каркаса при выполнении соответствующей задачи. По этому для того, чтобы ОПТ обеспечивали полноту и целостность системы, целесообразно классифицировать их категории полностью (Абдуганиев, 2023). В классификации О.И.Абдуганиева, основанной на приведенном выше анализе, все категории охраняемых территорий геоэкологически квалифицированы по их экологической функции и режиму охраны, а также использованию (таблица 1). В классификации уделялось внимание полному масштабу и видов ОПТ по установленной задаче и режиму, которые отмечены в действующем Законе Республики Узбекистан «Об охраняемых природных территориях» (2004).

Таблица 1.

Геоэкологическая классификация охраняемых природных территорий

№	Основные элементы экологического каркаса	Экологические группы ОПТ		Категории и типы ОПТ	
		Экологическая функция	режим охраны и использования	Согласно Закону об ОПТ Республики Узбекистан	По данным МСОП
I	Центральное ядро	Заповедно-эталонные	Строгий режим охраны	Государственные заповедники	Ia
				Комплексные (ландшафтные) заказники	Ib
				Государственные биосферные резерваты	Ib
		Сохранение и устойчивое использование природной среды	Имеет многоцелевой режим использования	Национальные парки	II
				Природные парки	II
				Земли лесного фонда (XIX)	II
			Частично режим заповедности	Государственные памятники природы	III
			Заказники	IV	

II	Территории экологического восстановления	Восстановление и сохранение ресурсов	Воспроизводимость и восстановление	Природных питомников	IV		
				Рыбохозяйственных зон	IV		
				Земли лесного фонда (IX)	IV		
			Поддерживать и сохранить			Курортные природные территории	V
						Рекреационные зоны	V
						Зоны формирования поверхностных и подземных вод	V
						Земли лесного фонда (V, VI, X, XI)	V
III	Экологические коридоры	Обеспечивает обмен веществ и энергии	Имеет строгий порядок природопользования	Водоохранные зоны	VI		
				Прибрежные полосы	VI		
				Зоны санитарной охраны водных объектов	VI		
				Земли лесного фонда (I, II, III, IV)	VI		
IV	Защита (буфер) зоны	Защищает от внешних негативных воздействий	Сохранение и охрана объектов	Охранные зоны ОПТ	VI		
				Земли лесного фонда (VII, VIII)	VI		

Таблица составлена О.И.Абдуганиевым (2023) на основании Закона Республики Узбекистан «Об особо охраняемых природных территориях» (2004 г.).

Этой классификацией может быть использована для обоснования функциональной структуры системы ОПТ, оценки ее полноты и целостности, а также для разработки общей схемы экологического каркаса. Следовательно, вначале в классификации были определены основные элементы системы ОПТ и составляющие их категории и, идентично, прикреплены к 4 основным элементам экологического каркаса (таблица 1).

Такие подходы дает возможность создать систему ОПТ, направленную на обеспечение взаимосвязь социальных, экономических и экологических интересов и организацию устойчивого развития районов. В стратегических планах концепции устойчивого развития и сохранения биоразнообразия аргументировано, что сохранение БЛР и обеспечение устойчивого развития общества производится за счет усовершенствования системы ОПТ.

В экологическом каркасе наблюдается комплекс функций, связанных с поддержанием экологического баланса, а также БЛР. Одним из условий, необходимых для выполнения этой функции, является систематический характер сети ОПТ. Это осуществляется путем объединения ОПТ с

природными, природно-антропогенными и антропогенными ландшафтами отдельной и отличающейся категории в единую систему.

Экологический каркас состоит из двух систем, противопоставленных друг другу по форме и функциям систем, т. е. уникальных природных и антропогенных структур. Экологический каркас должен сочетать в себе демоэкономический каркас с природным каркасом и соединять их друг с другом. Поэтому экологический каркас не считается единой системой по своему структурно-функциональному составу. Населенные пункты, промышленные центры и связанные с ними коммуникационные структуры и сельскохозяйственные угодья составляют основу демоэкономического каркаса. С помощью этих двух частей экологического каркаса, то есть элементов демоэкономического каркаса, система ОПТ должна быть выпитана друг другом и образовывать единое целое.

Экологический каркас выступает в качестве компенсирующей системы между демоэкономическим и природными каркасами. Поэтому при формировании экологического каркаса требуется в первую очередь определить элементы каркаса на основе эколого-функционального районирования территории, то есть анализа структуры землепользования. При проектировании и обосновании экологического каркаса в землестроительных работах, важно рассмотреть категории земельного фонда.

Потому что экологическое состояние территории и показатели антропогенной нагрузки в основном зависят от структуры использования категорий земельного фонда. В связи с этим в составе экологического каркаса должен быть корреляционная связь в территориальном расположении элементов демоэкономического каркаса с ОПТ. Например, в Ферганской долине создать древесные насаждения вдоль железных и автомобильных дорог, санитарно-защитные зоны на промышленных предприятиях, экологические леса вокруг насаждений и т. д. Разнообразие структурного состава экологического каркаса связано с его функционально-территориальной структурой, такое состояние также определяет функцию каждого элемента в системе. Некоторые исследователи выделяют следующие элементы экокаркаса, независимо от его функционально-территориальной структуры: центральное ядро, экологический коридор, буферную зону, зоны восстановления и ступенчатые части.

Согласно анализу взглядов, приведенных на функционально-территориальную структуру экологического каркаса, система ОПТ является основой экологической инфраструктуры. Поэтому в качестве основных элементов, определяющих функционально-территориальную структуру экологического каркаса, рассматривались центральное ядро, эколого-восстановительные зоны, экологические коридоры и защитные зоны, приведенные в геоэкологической классификации ОПТ (табл. 1). Ландшафтный подход является одним из широко используемых и научно

обоснованных подходов к проектированию экологических каркасов. Использование такого подхода дает возможность учитывать степень и действие антропогенного воздействия на исследуемой территории, особенности природных комплексов. Одним из широко используемых методов определения степени антропогенного воздействия на основе ландшафтного подхода является оценка эколого-хозяйственного состояния территории.

Такая парадигма считается важным при определении состояния и состава экологического каркаса в структуре землепользования региона и выработке рекомендаций по его улучшению. Соответственно разработка проекта структуры экокаркасов в рамках административно-территориальных единиц должна поддерживаться государством. Подобные сооружения также внедряются в Республике Узбекистан в последующие годы в рамках общенационального проекта «Зеленое пространство». В настоящее время показатель охвата основными категориями ОПТ в Ферганской долине равен 1,7 %. Для сохранения БЛР и обеспечения устойчивого развития необходимо расширение категорий земель, входящих в состав природно-заповедного фонда (ПЗФ).

Уделено внимание совершенствованию состава элементов экологического каркаса с учетом природно-экологических, экономических и социальных характеристик Ферганской долины. Экологический каркас включает типичные природные комплексы, имеющие особое экологическое, научное и культурное значение для Ферганской долины, бассейны рек, ареалы редких и малозаметных видов, опорные орнитологические районы, генетические резервации лесов, уникальные геологические объекты, районы повышенной рекреационной ценности. Одним из направлений решения этих проблем является проведение землеустроительных работ на основе концепции экологического каркаса административно-территориальных единиц Ферганской долины.

ЗАКЛЮЧЕНИЕ

Исследование, проведенное в рамках темы исследования, позволяет сделать следующие выводы, выработать рекомендации и предложения:

1. В зарубежной и отечественной литературе в различных источниках и нормативных документах выявлено, что существуют различия в описаниях, данных с точки зрения содержания, структурно-функциональной структуры системы ОПТ. Это указывает на необходимость совершенствования нормативно-правовых актов, связанных с ОПТ, подходов, которые являются приоритетными в национальном законодательстве, а также критериев и принципов, используемых при организации системы охраняемых природных территорий. В исследовании вопросы организации системы ОПТ изучались на основе взаимосвязанных научных подходов, таких как ландшафтный, системный, исторический, административно-территориальный, функциональный и экологический.

Эти подходы, в свою очередь, служат основой для правильной организации исследований, связанных с расширением и совершенствованием системы ОПТ.

2. Для обеспечения полноты и целостности системы ОПТ было определено, что вопросы геоэкологической классификации всех их категорий, исходя из их экологической функции, режима охраны и использования, являются приоритетными. Впервые была предложена классификация, позволяющая объединить все категории и виды ОПТ, перечисленные в нормативно-правовых документах Республики Узбекистан, в единую систему. Эта классификация была использована для определения структурного состава системы ОПТ, оценки ее полноты и целостности, а также разработки общей схемы экологического каркаса.

3. По функциям ОПТ в перспективном экологическом каркасе Ферганской долины были разделены на центральное ядро, эколого-восстановительные территории, экологические коридоры и буферные зоны. Для формирования перспективного экологического каркаса были введены 2 государственных заповедника, 5 национальных природных парков, 6 частных заповедников, 3 экологических зон строгого природопользования, памятники природы и экологические коридоры.

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*Абдуллаев Э.А.
Жиззах политехника институти
“Энергетика” кафедраси доцент в.б.*

**ҚУЁШ ФОТОЭЛЕКТР СТАНЦИЯСИГА ЭГА БЎЛГАН
КОРХОНАЛАРНИНГ ЮКЛАМА ГРАФИКЛАРИНИ ЭЛЕКТР
ЭНЕРГИЯСИНИ СОТИШ ИМКОНИАТЛАРИНИ ЭЪТИБОРГА
ОЛИБ ОПТИМАЛЛАШТИРИШ**

Аннотация. Ушбу мақолада қуёш фотоэлектр станциясига эга бўлган корхоналарнинг юклама графикларини электр энергиясини сотиш имкониятларини эътиборга олиб оптималлаштириш масаласининг математик модели ва оптималлаштириш алгоритми ишлаб чиқилган.

Калит сўзлар: оптималлаштириш, қуёш фотоэлектр станцияси, юклама, электр энергетика тизими, инвертер, аккумулятор батареяси.

*Abdullaev E.A.
"Energy" department
associate professor v.b.
Jizzakh Polytechnic Institute*

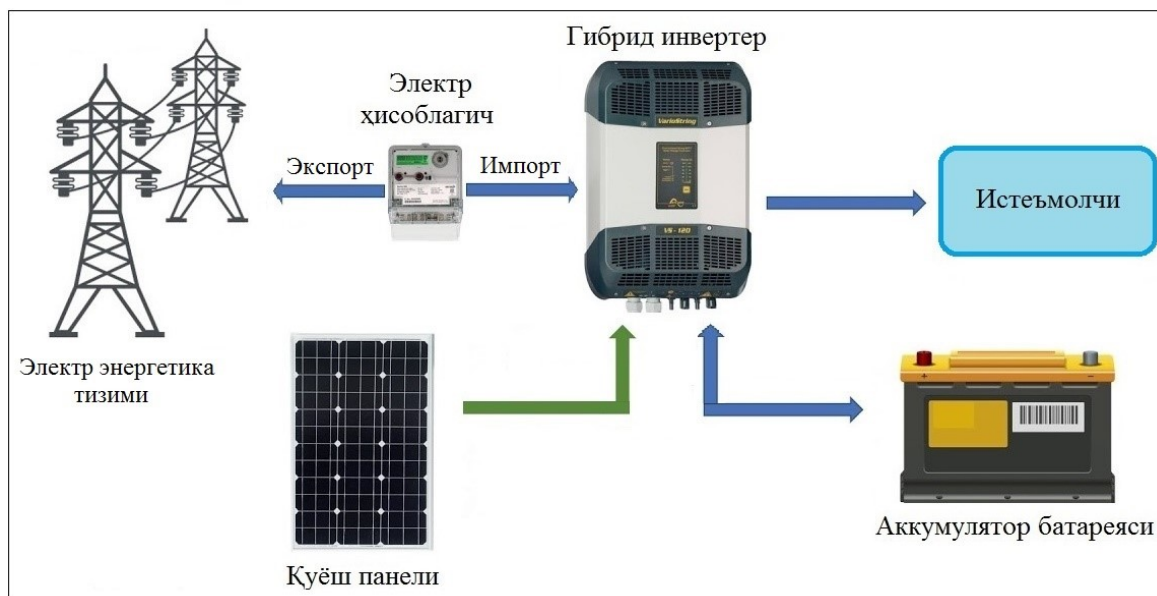
**OPTIMIZATION OF THE LOAD GRAPHICS OF THE ENTERPRISES
WITH SOLAR PHOTOELECTRIC PLANT TAKING INTO ACCOUNT
THE POSSIBILITIES OF ELECTRICITY SALES**

Abstract. In this article, optimization algorithm and mathematical model of the problem of optimization of the load graphs of enterprises with solar photoelectric power plants, taking into account the possibilities of selling electricity, has been developed.

Key words: optimization, solar photovoltaic power plant, load, power system, inverter, storage battery.

Бугунги кунда ўрнатилаётган қуёш фотоэлектр станцияларида ишлаб чиқарилаётган электр энергияси нафақат корхоналарда истеъмол қилинмоқда, балки электр энергетика тизимига ҳам сотилмоқда. Бундай вазиятларда корхоналарда электр энергетика тизимидан олинадиган ва тизимга сотиладиган электр энергиясини ҳисобини олиш учун махсус электр энергиясини ҳисоблаш ускуналаридан фойдаланилмоқда. Бундай вақтларда қайта тикланувчан энергия манбаларида ишловчи электр станцияларидан оқилана фойдаланиш учун маълум вақтларда энергияни тўплаш ва қувват дефицити мавжуд бўлган вақтларда истеъмолчиларга бериш учун хизмат қиладиган аккумулятор батареяларидан фойдаланиш мумкин [1]. Ушбу мақолада қуёш фотоэлектр станциясига эга бўлган

корхоналарнинг юклама графикларини электр энергиясини сотиш имкониятларини эътиборга олиб оптималлаштириш масаласини кўриб чиқамиз. 1-расмда электр энергетика тизимига хусусий куёш фотоэлектр станциясида ишлаб чиқарилувчи электр энергиясини сотиш имкониятига эга бўлган истеъмолчининг электр таъминоти принципиал схемаси келтирилган.



1-расм. Электр энергетика тизимига хусусий куёш фотоэлектр станциясида ишлаб чиқарилувчи электр энергиясини сотиш имкониятига эга бўлган истеъмолчи электр таъминоти принципиал схемаси

Ушбу муаммони ҳал қилишда аккумулятор батареясининг электр сиғими W , режалаштирилган кун учун истеъмолчининг юклама графиги $P_L(t)$, электр энергетика тизимидан олинувчи электр энергиясининг сотиб олиш тарифи C_t , куёш фотоэлектр станциясининг қувват графиги $P_{PV}(t)$, аккумулятор батареясини зарядлашнинг минимал ва максимал чегаравий қувватлари (разрядланиш қуввати манфий белги билан олинади), электр энергетика тизимига сотилувчи электр энергиясининг нарҳи C_s маълум маълумотлар ҳисобланади. Масалани ечиш натижасида аниқланувчи номаълумлар бўлиб куёш фотоэлектр станцияси истеъмолчига берувчи оптимал актив қувват графиги $P_{G.PV}(t)$, электр энергетика тизимидан олинувчи оптимал актив қувват графиги (истеъмолчининг электр энергетика тизимига нисбатан оптимал юклама графиги) $P_{PS}(t)$ ва аккумулятор батареясининг оптимал зарядлаш/разрядланиш қувватлари графиги $P_{B.PV}(t)$ куёш фотоэлектр станциясида ишлаб чиқарилиб электр энергетика тизимига берилувчи актив қувват $P_S(t)$ лар ҳисобланади.

Бундай кўринишдаги оптималлаштириш масалани ҳал қилиш учун қуйидагича математик модел таклиф этилади. Унга кўра минималлаштирилувчи мақсад функцияси бўлиб сутка давомида куёш фотоэлектр станциясида ишлаб чиқарилувчи электр энергиясини электр

энергетика тизимига сотиш имкониятини ҳисобга олган ҳолда қуёш фотоэлектр станцияси ва электр энергетика тизимидан олинувчи электр энергия билан боғлиқ бўлган умумий харажатлари функцияси ҳисобланади [2,3]:

$$Z = \sum_{t=1}^{24} [C_t P_{PS}^{(t)} - C_s P_S^{(t)} + \beta P_{G.PV}^{(t)}] \rightarrow \min. (1)$$

бу ерда, C_t – сутканинг t - соатида электр энергетика тизимидан олинувчи электр энергиясининг нархи (тариф); $P_{PS}^{(t)}$ – сутканинг t - соатида электр энергетика тизимидан олинувчи актив қувват; C_s – сутканинг t - соатида электр энергетика тизимига сотилувчи электр энергиясининг нархи (тариф); $P_S^{(t)}$ – сутканинг t - соатида электр энергетика тизимига берилувчи актив қувват; $P_{G.PV}^{(t)}$ – сутканинг t - соатида қуёш фотоэлектр станциясидан берувчи актив қувват; β – қуёш модуллари ва унга хизмат қилувчи ускуналарни ишлаб чиқариш, ўрнатиш, фойдаланиш ва техник хизмат кўрсатиш харажатларини ўз ичига олган коэффициент ҳисобланади [4].

Чегаравий шартлар

Сутканинг ҳар бир соатида истеъмолчиларнинг қувват баланси бўйича:

$$P_{PS}^{(t)} - P_S^{(t)} + P_{G.PV}^{(t)} = P_L^{(t)}, \quad t = 1, 2, \dots, 24 (2)$$

Сутканинг ҳар бир соатида қуёш фотоэлектр станциясининг аккумулятор батареясини зарядлаш/разрядланиш қувватини эътиборга олган ҳолатдаги қуввати бўйича:

$$P_{PV}^{(t)} - P_{B.PV}^{(t)} = P_{G.PV}^{(t)}, \quad t = 1, 2, \dots, 24 (3)$$

Аккумулятор батареясининг мумкин бўлган максимал зарядланиш (разрядланиш) қуввати бўйича (разрядланиш манфий ишора билан олинган):

$$-P_{B.PV.\max} \leq P_{B.PV} \leq P_{B.PV.\max}, \quad t = 1, 2, \dots, 24 (4)$$

Сутканинг ҳар соатида қуёш фотоэлектр станциясининг инверторини максимал қуввати билан белгиланадиган чекланган қуввати бўйича:

$$0 \leq P_{G.PV}^{(t)} \leq P_{G.PV.\max}^{(t)}, \quad t = 1, 2, \dots, 24 (5)$$

Аккумулятор батареясининг сифими бўйича

$$W_{bal.PV} + \sum_{k=1}^{t-1} [P_{PV}^{(k)} - P_{G.PV}^{(k)}] * \Delta t^{(k)} \leq W_{PV}, \quad t = 2, 3, \dots, 24 (6)$$

Сутканинг ҳар бир соатида электр энергетика тизимидан олинувчи актив қувват бўйича:

$$0 \leq P_{PS}^{(t)} \leq P_{PS.\max}^{(t)}, \quad t = 1, 2, \dots, 24 (7)$$

Сутканинг ҳар бир соатида электр энергетика тизимига берилувчи актив қувват бўйича:

$$0 \leq P_S^{(t)} \leq P_{S.max}^{(t)}, \quad t = 1, 2, \dots, 24 \quad (8)$$

бу ерда: $P_{PV}^{(t)}$ – сутканинг t инчи соатида куёш фотоэлектр станциясининг актив қуввати; $P_L^{(t)}$ – сутканинг t инчи соатида истеъмолчининг умумий актив қувват юкламаси; $P_{B.PV.max}$ – аккумулятор батареясининг мумкин бўлган максимал зарядланиш ёки разрядланиш қуввати; $P_{G.PV.max}^{(t)}$ – сутканинг t инчи соатида куёш фотоэлектр станцияси томонидан истеъмол учун ишлаб чиқариш мумкин бўлган максимал қувват; W_{PV} – куёш фотоэлектр станциясида ўрнатилган аккумулятор батареясининг электр сиғими; $W_{bal.PV}$ – куёш фотоэлектр станциясига ўрнатилган аккумулятор батареясининг олдинги кундан қолган электр заряди, $P_{PS.max}^{(t)}$ – сутканинг t инчи соатида электр энергетика тизимидан олиш мумкин бўлган максимал қувват; $P_{S.max}^{(t)}$ – сутканинг t - инчи соатида электр энергетика тизимида бериш мумкин бўлган максимал актив қувват.

Ушбу моделда ишлаб чиқариш қувватидан қатъий назар куёш фотоэлектр станциясида ишлаб чиқарилувчи электр энергиянинг нархи ўзгармас деб қабул қилинган.

Ҳосил бўлган математик моделда мақсад функцияси ва чегаравий шартлар чизиқли кўринишда бўлганлиги сабабли уни ечиш мос чизиқли дастурлаш усулларида *Симплекс* усули ёрдамида амалга оширилади.

Алгоритмнинг самарадорлиги ишлаб чиқарувчи электр энергиясини электр энергетика тизимида сотиш имконияти мавжуд бўлган хусусий куёш фотоэлектр станциясига эга корхонанинг электр юкламасини электр энергетика тизимидан олинувчи ва куёш фотоэлектр станция ишлаб чиқарувчи қувватлар ўртасида оптимал қоплаш мисолида ўрганилади.

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*Абдуллаева А.Т.
студент магистратуры
Научный руководитель:
Кощанова Р.Е., кандидат биологических наук
доцент
кафедра «Общая биология и физиология»
Каракалпакский государственный университет им. Бердаха
Республика Узбекистан*

БИОЭКОЛОГИЧЕСКИЕ ОСОБЕННОСТИ ПОЧВЕННЫХ КЛЕЩЕЙ

Аннотация. В статье рассматриваются биоэкологические особенности почвенных клещей. Почвенные клещи питаются разлагающейся органикой и участвуют в процессе почвообразования. Если состав почвы меняется в сторону увлажнения, повышается ее температура, то нарушается экологический баланс грунта, и почвенные клещи превращаются из благотворно влияющих насекомых во вредителей.

Ключевые слова: температура, почва, органика, увлажнения, метод, корень.

*Abdullaeva A.T.
graduate student
Scientific supervisor:
Koschanova R.E., candidate of biological sciences
associate professor
Department of General Biology and Physiology
Karakalpak State University named after. Berdaha
The Republic of Uzbekistan*

BIOECOLOGICAL FEATURES OF SOIL MITES

Annotation. The article discusses the bioecological characteristics of soil mites. Soil mites feed on decaying organic matter and participate in the process of soil formation. If the composition of the soil changes towards moisture, its temperature rises, then the ecological balance of the soil is disrupted, and soil mites turn from beneficial insects into pests.

Key words: temperature, soil, organic matter, moisture, method, root.

Почвенный клещ – насекомое семейства акаридных. Этот тип клещей включает довольно много разновидностей. Очень многие почвенные клещи совершенно безопасны и даже приносят некоторую пользу растениям.

Многочисленность видов почвенных клещей, обитающих под поверхностью земли, предполагает их классификацию и разделение по группам, в зависимости от численности, распространенности, способу питания и степени влияния на жизнь человека. Выделяет две группы почвенных клещей:

➤ *Tirophagus* – акаридный клещ, называемый гнилостным, удлиненным;

➤ *Rhizoglyphus echinopus* – луковичный корневой, также из отряда акариформных.

Взрослый клещ (имаго) имеет овальное, сужающееся к голове, тело, покрытое щетинками. Цвет - светло-желтый, тело покрыто у основания мягким хитиновым щитком. Толстые короткие лапы снабжены шипами и такими же щетинками, как на теле.

Самки немного больше самцов, их размер - немного больше 1 мм. Яйца белого цвета, крупного размера. Личинки – это эмбрионы, вылупившиеся из яиц, имеют 3 пары лап.

Следующая за личинкой фаза развития - нимфа, немного меньше имаго, имеет 4 пары лапок. Есть еще одна фаза нимфы, если насекомое живет в неблагоприятных климатических условиях, когда замедляется его жизнедеятельность. Эта стадия называется "гипопус". Смена фаз развития клеща происходит в виде линьки. При этом сбрасывается хитиновый панцирь, и клещ переходит в следующую стадию своего развития.

Почвенные клещи, размножаются по двуполому типу:

- ✓ самец оплодотворяет самку;
- ✓ в матке ее яйцеклетка оплодотворяется;
- ✓ самка откладывает яйца.

Примерно 10 суток после отложения яйца находятся в эмбриогенезе. Срок может сокращаться при наилучшем соотношении влажности и температуры. Одна самка может отложить в сутки до 24 яиц, а за всю свою жизнь - до 800.

Созревание личинок и нимф идет по постоянному сценарию, только временные рамки разных стадий зависят от условий окружающей среды. Оптимальная для развития влажность составляет от 80 до 100 процентов, и развитие личинок и нимф замедляется при ее снижении с 60 процентов.

Если почва прогрелась до 15 градусов тепла - личинка развивается за 22 дня. Если температура окружающей среды составила 20 градусов - за 4 дня. Через 3 дня сбрасывается панцирь при температуре +23 градуса. 2 дней хватает для быстрого развития при температуре 25 градусов тепла и выше. Среди почвенных клещей луковичные половозрелые клещи теплолюбивы, и если температура среды обитания снижается до 9.5 градусов, то они переходят в стадию диапаузы.

Клещи питаются гниющими остатками и разлагающейся органикой, также поедают луковицы и корни живых растений. Если состав почвы

меняется в сторону увлажнения, повышается ее температура, то увеличивается популяция насекомых. При этом нарушается экологический баланс грунта, и почвенные клещи превращаются из благотворно влияющих насекомых во вредителей.

Микроскопический размер почвенного клеща (до 0,5 мм) не влияет на развитие корнеплодов и корней, если вред от насекомых не переходит в большой объем наносимого ущерба. Безостановочное поедание корня растения большой колонией паразита приведет к неминуемой гибели растения. Почвенные клещи:

- ✓ наносят повреждение рассады;
- ✓ оставляют пыльцу на листьях, тем самым ускоряется увядание растений;
- ✓ переносят грибковые и другие болезнетворные бактерии;
- ✓ портят семена.

Опасность этого вредителя заключается в активизации гнилостных процессов в тканях насаждений. Это помогает клещам проникнуть внутрь, так как ослабленные растения легче поддаются негативным внешним воздействиям. Такие вредители характеризуются микроскопическими размерами (от 0,2 до 1 мм), из-за чего их сложно обнаружить. Для таких особей характерна скрытая жизнедеятельность – в слое почвы. По мере размножения их количество увеличивается, что вынуждает клещей выбираться на поверхность грунта. Прекрасные условия для их развития создаются в теплицах, изобилующих теплом, влагой и свежей пищей. Нужно бороться с почвенными клещами нижеследующими методами:

- следует снижать численность клещей при сильном их размножении.
- применять физические методы, например, как, очистка грунта и подземных частей насаждений, а также химические методы.
- нормализовать уровень влажности почвы и воздуха.

Эти представители большой группы членистоногих, обитающие в верхних слоях почвы, в естественной среде, надо признать, являются важной частью экосистемы. Почвенные клещи питаются разлагающейся органикой и участвуют в процессе почвообразования. А вот попав в «тепличные» условия (в квартиру, в оранжерею и так далее), клещи переключаются на здоровые домашние растения и становятся вредителями.

Таким образом, можно сделать вывод, что почвенный клещ приносит пользу, только если его численность совсем мала. В случаях его распространения и увеличения колоний нужно принимать срочные меры по его уничтожению.

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*Абдуллаева Ф.Б.
Салиханова Д.С.
Абдурахимов А.А.
Балтаев У.С.
Сагдуллаева Д.С.*

РЕГЕНЕРАЦИЯ ПЕРЛИТА ПОСЛЕ ВЫМОРАЖИВАНИЯ ПОДСОЛНЕЧНОГО МАСЛА

Аннотация. В данной статье изучены способы регенерации и влияние их на фильтрующие способности перлита. Установлено, что с повышением концентрации щелочи до 40% при различных соотношениях степень очистки растительного масла повышается, однако с увеличением степени регенерации она уменьшается. С повышением концентрации кислоты приводит к увеличению дистиллированной воды, что приводит к повышению себестоимости и нерациональной трате воды. Определено, что регенерированный перлит после вымораживания фильтрует насыщенные жирные кислоты, т.к. при снижении температуры с восковыми веществами, также насыщенные жирные кислоты начинают кристаллизоваться и податать с фильтрующим агентом в осадок. За счёт этого в системе повышается ненасыщенные жирные кислоты.

Ключевые слова: перлит, рафинация, растительное масло, вымораживание, вермикулит, прокалка, вспучивание, адсорбенты, восковое вещество, кислотное число, перекисное число.

*Abdullaeva F.B.
Salihanova D.S.
Abdurakhimov A.A.
Baltaev U.S.
Sagdullaeva D.S.*

REGENERATION OF PERLITE AFTER FREEZING SUNFLOWER OIL

Annotation. This article examines regeneration methods and their effect on the filtering abilities of perlite. It has been established that with an increase in alkali concentration to 40% at various ratios, the degree of purification of vegetable oil increases, but with an increase in the degree of regeneration it decreases. As the acid concentration increases, the amount of distilled water increases, which leads to increased costs and wasted water. It has been determined that regenerated perlite filters saturated fatty acids after freezing, because When the temperature decreases, waxy substances and saturated fatty

acids begin to crystallize and precipitate with the filtering agent. Due to this, unsaturated fatty acids increase in the system.

Keywords; perlite, refining, vegetable oil, freezing, vermiculite, calcination, swelling, adsorbents, waxy substance, acid value, peroxide value.

Один из современных трендов в развитии масложировой промышленности в мире является производство конкурентоспособных функциональных продуктов питания с улучшенной биологической ценностью, которые безопасны для потребления. Поэтому создание и улучшение методов возделывания и переработка растительных масел, способных производить высококачественные масложировые продукты, представляют собой одну из ключевых задач [1-3].

Узбекистане активно внедряются новая техника и технология для производства светлых растительных масел из подсолнечника, сои и сафлора, которые имеют отличие хлопкового масла по составу и свойствам. Например, в светлых маслах содержатся восковые (стерины, воски и т.п.) вещества, которых относительно мало в хлопковых маслах. Напротив, в хлопковом масле наряду со значительным содержанием госсипола и его производных имеются фосфолипиды различного строения [4].

Восковые и высокоплавкие вещества выводятся из рафинированного или дезодорированного масла способом вымораживанием (винтеризацией) с целью получения салатного масла, т.е. более очищенного и готового к реализации как вымороженное товарное масло [5,6].

Товарный вид растительных масел также является одним из главных критериев при производстве, однако за последние годы из-за нехватки масличных культур, промышленность столкнулась с трудностями, т.е. получение прозрачных масел, из-за дороговизны фильтрующих материалов из-за рубежа. Известные насыщенные восковые вещества, благодаря их высокой температуре плавления (от 32 до 98 °С), при охлаждении масла образуют тонкую и очень устойчивую взвесь кристаллов, которая часто называется "сеткой". Это явление существенно ухудшает внешний вид масла и его качество. Ни один из этапов процесса рафинирования масла (включая гидратацию, щелочную нейтрализацию, отбеливание и дезодорацию) практически не способствует удалению восковых веществ из него.

Поэтому наличие восковых веществ в масле (обычно в диапазоне от 0,02% до 0,3%) не только мешает достичь высокого товарного качества масла, но и вызывает затруднения в его обработке и хранении. Восковые вещества создают проблемы при процессах полировочного фильтрования рафинированных масел. Также имеются данные о негативном воздействии на катализаторы при гидрировании масел.

На сегодняшний день существует много способов удаления или выведение восковых веществ из растительных масел.

Известен метод очистки растительных масел от восков с использованием процесса замораживания. Он включает охлаждение масла с добавлением специальных фильтрующих порошков, которые способствуют образованию центров кристаллизации. После выдержки масла при низких температурах осуществляется отделение осадка путем фильтрации [7]. Недостатком известного метода является то, что вспомогательные фильтрующие порошки (такие как цеолиты, фильтр перлит и другие) содержат поры и капиллярные каналы, которые заполняются как воском, так и нейтральным маслом. Это приводит к большим потерям масла вместе с использованным фильтрующим порошком и увеличенному его расходу. Кроме того, в этом методе фильтрующие порошки используются однократно, а адсорбированный на них воск не подлежит утилизации.

Существует метод очистки растительных масел от восковых веществ, который включает добавление инициатора кристаллизации в масло и отделение образовавшихся кристаллов путем использования восковых веществ, извлекаемых из растительных масел. В этом методе источником восковых веществ служит отработанный фильтрующий порошок, который образуется в результате процесса замораживания растительных масел. [8]. Существуют недостатки в известном методе, связанные с тем, что в процессе замораживания масла с использованным фильтрующим порошком в масло попадает большое количество продуктов окисления, таких как перекисные, анизидиновые, диеновые и триеновые соединения масла. Эти соединения находятся в порах и капиллярах использованного фильтрующего порошка, что приводит к ухудшению качества масла.

Однако применяемые фильтрующие материалы применяемые в данный момент на предприятиях республики после использования накапливаются отходами, что приводит к экологическим проблемам. С этой целью в данной работе проведены исследования их регенерации.

Регенерацию проводили с различными концентрациями щелочи (NaOH, KOH). Регенерацию проводили в следующем порядке: образцы отработанного перлита смешивали щелочью при различных соотношениях и концентрациях. Смешивали при постоянном перемешивании при температуре 40-45 °С в течении 30 минут. Далее нейтрализовали дистиллированной водой до pH -7. Нейтрализованный материал сушили и измельчали.

Результаты исследований приведены в табл.1.

Таблица 1.

Влияние обработки щелочью (KOH) перлита на степень их очистки от восковых веществ

Концентрация щелочи, %	Соотношение щелочи к перлиту,	Степень очистки растительного масла после регенерации, %		
		1	2	3

10	1:0,5	73,5	68,7	62,4
	1:1	78,4	75,1	72,4
	1:1,5	85,0	81,4	77,2
	1:2	89,1	84,4	77,9
20	1:0,5	75,6	72,7	68,4
	1:1	82,6	79,6	74,5
	1:1,5	88,4	85,2	80,1
	1:2	91,2	88,6	81,4
30	1:0,5	76,9	72,8	70,6
	1:1	79,7	76,8	73,8
	1:1,5	87,8	84,3	81,3
	1:2	93,4	90,7	87,8
40	1:0,5	77,2	68,7	62,4
	1:1	81,6	78,4	76,2
	1:1,5	89,4	84,6	81,6
	1:2	95,7	92,3	89,4

Как видно из табл. 1 с повышением концентрации щелочи до 40% при различных соотношениях степень очистки растительного масла повышается, однако с увеличением степени регенерации она уменьшается. С повышением концентрации кислоты приводит к увеличению дистиллированной воды, что приводит к повышению себестоимости и нерациональной трате воды. Когда в республике остро стоит вопрос о нехватке воды.

По вышеуказанной таблице можно сделать вывод, что для регенерации достаточно 20% - ный щёлочь, при соотношении 1:2, при котором в первый раз можно получить со степенью чистоты 91,2%.

После регенерации перлита проведено вымораживание различных светлых масел и изучено их органолептические и физико-химические показатели. Данные приведены в табл. 2.

Как видно из табл.2. все показатели после вымораживания соответствуют по требованиям ГОСТа, однако эти данные 1-ой стадии после регенерации. Регенированный перлит как видно из табл.1. после –ой или 3-ий степени снижает свои свойства, поэтому далее будет изучен другие способы регенерации.

Таблица 2.

Показатели растительных масел регенерированным перлитом

Показатели	Растительные масла			
	Рафинированное подсолнечное масло вымораживание		Рафинированно соевое масло	
	до выморажива- ние	после вымора- живание	до выморажи- вание	после вымора- живание
Кислотное число, мг КОН/г	0,4	0,36	1,6	0,09

Перекисное число, ½ ммоль О/кг	4,6	3,4	5,4	4,6
Прозрачность	мутное	прозрачное	легкое помутнение	прозрачное
Запах и вкус	Специфический запах и вкус	Свойственно по ГОСТу для данного типа	Специфический запах и вкус	Свойственно по ГОСТу для данного типа

Далее изучен жирнокислотный состав растительных масел (подсолнечное, соевое), вымороженных регенированным перлитом.

Таблица 3.

Жирно кислотный состав (ЖКС) до и после вымораживания с регенированным перлитом

Название жирных кислот подсолнечного масла	Исходный ЖКС подсолнечного масла, %	ЖКС после вымораживания рафинированного подсолнечного масла с регенированным перлитом, %	Исходный ЖКС соевое масла, %	ЖКС после вымораживания рафинированного соевое масла с регенированным перлитом, %
Стеариновая (C ₁₈ H ₃₆ O ₂)	4,1	2,9	2,5	1,8
Пальмитиновая (C ₁₆ H ₃₂ O ₂)	6,4	3,4	9,3	6,6
Миристиновая (C ₁₄ H ₂₈ O ₂)	0,07	-	0,2	-
Арахидиновая (C ₂₀ H ₄₀ O ₂)	0,25	-	0,17	2,4
Олеиновая (C ₁₈ H ₃₄ O ₂)	19,1	22,5	21,5	27,2
Линолевая (C ₁₈ H ₃₂ O ₂)	67,09	71,2	52,9	61,4
Другие ЖК	2,99	100,0	13,43	99,4

Как видно из табл. 3. регенированный перлит после вымораживания фильтрует насыщенные жирные кислоты, т.к. при снижении температуры с восковыми веществами, также насыщенные жирные кислоты начинают кристаллизоваться и податать с фильтрующим агентом в осадок. За счёт этого в системе повышается ненасыщенные жирные кислоты.

Для сравнение исходного и регенированного перлита проведен сравнительный анализ данные которых приведены в рис 1.

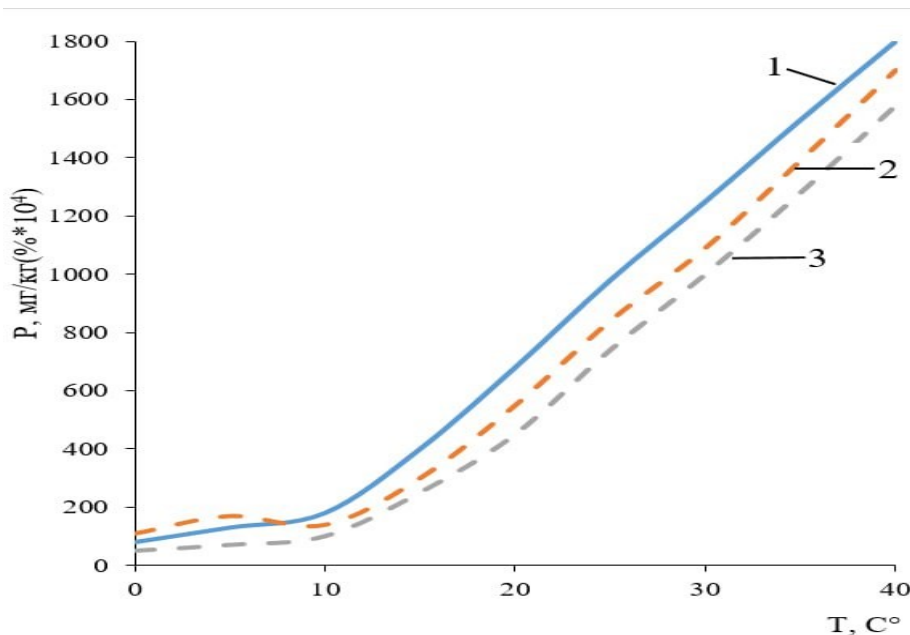


Рис. 1. Влияние температуры на растворимость восков
 1 -перлит регенированный после 2-ой стадии; 2- регенированный после 1-ой стадии; 3- исходный перлит.

Из рис.1. видно, что с повышением температуры до 40 °С максимально растворяется восковые вещества. Растворимость определяли, нагревая до 40 °С масло медленно охлаждали. Затем масло отфильтровали осадок, обезжировали охлажденным до 0 °С гексаном, высушивали и взвешивали. Концентрация растворенность в масле восков (растворимость) рассчитывали по формуле:

$$K_B = \frac{M_{BB.} - M_0}{M_M}$$

где: K_B – концентрация восков в масле; мг/кг; $M_{BB.}$ -исходное количество восковых веществ, мг; M_0 - осадок на фильтре,мг; M_M - масса отфильтрованного масла, кг.

Как видно из графика исходный перлит лучше фильтрует после вымораживания, по сравнению с регенированными. Однако после каждого ренерированного перлита ухудшается его фильтрующая способность. Интенсивность процесса кристаллизации протекает двумя способами, т.е. путём переохлаждения, или с использование инициаторов для кристаллизации затравочных материалов. Увеличение пересыщения ускоряет образование зародышей, но это приводит к резкому увеличению вязкости системы, затрудняющие диффузионные процессы масспереноса, в результате которого размеры кристаллов уменьшаются, что затрудняет процесс осаждения. Поэтому рационально использовать инициатор для образования центров кристаллизации, которым является перлит.

Далее изучен влияние времени на качественные показатели вымороженных масел регенированным перлитом. Данные которых приведены в рис.2.

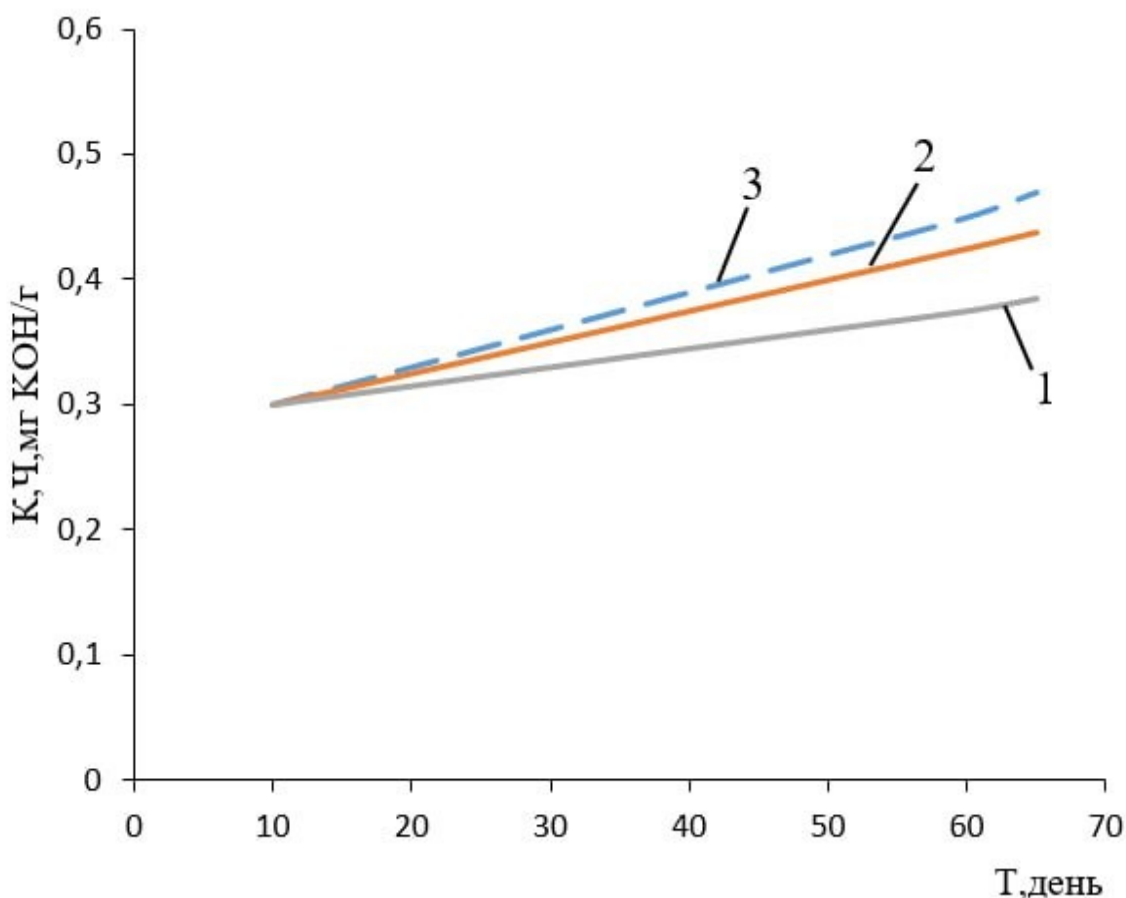


Рис.2. Влияние времени хранения на кислотное число вымороженных подсолнечных масел

1-исходный перлит; 2-перлит регенированный после 1-ой стадии; 3-регенированный после 2-ой стадии;

Сравнительные данные из рис.2. показано, что вымораживание исходным перлитом долгое время максимально удерживает кислотное число подсолнечного растительного масла. Вымораживание с применением регенированным перлитом после 1-ой или 2-ой стадии близки к исходному образцу. Это подтверждает о правильности проведения процесса регенерации с подобранными щелочью. Кислотное число при вымораживании исходным перлитом, повышается с 0,3 мг КОН/г повышается 0,36 мг КОН/г через 60 дней хранения. При использовании регенированных образцов перлита кислотное число повышается с 0,3 мг КОН/г до 0,45 мг КОН/г спустя 60 дней, это подтверждает о наличии остатков щелочи или других примесей в составе перлита.

Таким образом, регенерация со щелочью позволит сэкономить импортный фильтрующий материал, что позволит снизить себестоимость получаемого растительного масла. Установлено, что с повышением

концентрации щелочи до 40% при различных соотношениях степень очистки растительного масла повышается, однако с увеличением степени регенерации она уменьшается. С повышением концентрации кислоты приводит к увеличению дистиллированной воды, что приводит к повышению себестоимости и нерациональной трате воды. Определено, что регенированный перлит после вымораживания фильтрует насыщенные жирные кислоты, т.к. при снижении температуры с восковыми веществами, также насыщенные жирные кислоты начинают кристаллизоваться и податься с фильтрующим агентом в осадок. За счёт этого в системе повышается ненасыщенные жирные кислоты.

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*Абдуназаров Х.М., к.г.н.
доцент
кафедра “Географии”
Термезский государственный университет
Узбекистан, Термез
Умарова М.Х.
старший преподаватель
кафедра “Географии”
Термезский государственный университет
Узбекистан, Термез*

ЕСТЕСТВЕННО-МЕХАНИЧЕСКОЕ ДВИЖЕНИЕ НАСЕЛЕНИЯ СУРХОНДАРЬИНСКОЙ ОБЛАСТИ

Аннотация. Данная статья посвящена вопросам естественного и механического движения населения в Сурхандарьинской области, различиям в миграционном движении населения районов области, процессам механического движения населения.

Ключевые слова: механическое движение, естественное воспроизводство, миграция, внешняя миграция, внутренняя миграция, миграционный баланс.

*Abdunazarov Kh.M., Ph.D.
associate professor
Department of Geography
Termez State University
Uzbekistan, Termez
Umarova M.Kh.
senior lecturer
Department of Geography
Termez State University
Uzbekistan, Termez*

NATURAL-MECHANICAL MOVEMENT OF THE POPULATION OF SURKHONDARYO REGION

Abstract. This article is devoted to the issues of natural and mechanical movement of the population in the Surkhandarya region, differences in the migratory movement of the population of the regional districts, and the processes of the mechanical movement of the population.

Key words: mechanical movement, natural reproduction, migration, external migration, internal migration, migration balance.

Роль населения в развитии общества неопределима, и оно активно участвует в его развитии как неотъемлемая часть общества. Население создает материальные и духовные блага и в то же время считается потребителем этих созданных благ.

Сурхандарьинская область является одним из регионов с самыми высокими темпами естественного прироста населения в Республики Узбекистан. Основной причиной этого является высокая доля сельского населения (63,7% - на 1 января 2023 г.), сохранением большого количества детей в соответствии с историческими национальными традициями, высокой средней продолжительностью жизни и стабильностью смерти.

Естественный прирост населения происходит в основном за счет соотношения рождаемости и смертности среди населения. Одним из основных показателей, определяющих прирост населения, являются показатели баланса рождаемости, смертности и миграции на тысячу человек среди населения региона или определенной местности.

На прирост населения стран и регионов влияет не только естественный прирост населения, но и миграционные процессы населения.

Миграция населения— это переезд с постоянной или временной сменой места жительства. Люди всегда перемещаются между регионами с целью жить, работать, учиться и отдыхать. Их территориальные перемещения определяются на разные периоды в соответствии с их целями. Определенная часть населения, главным образом с целью учебы и работы, в течение одного дня отправляется в ближайшие города или села, не меняя места жительства.

Эксперты рассматривают такое движение населения как «маятниковую миграцию» и не включают его в реальное миграционное движение. Большинство специалистов по миграции населения исходят из процесса смены места жительства населения.

В переписях населения, проводимых в Узбекистане, мигрантами считалось население, иммигрировавшее и проживавшее в республике менее двух лет.

В конце XIX века и с начала XX века в регион начали иммигрировать русские и представители других национальностей. Во время Второй мировой войны в результате эвакуации населения из прифронтовых районов определенная часть населения была переселена регион.

В 1960-1970-е годы в регионе активизировались процессы внутренней миграции. В этот период в целях освоения Сурхан-Шерабадской долины и развития производительных сил согласно плану осуществлялось переселение из густонаселенных северных районов, горных и предгорных районов.¹²²

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Миграция населения в Сурхандарьинской области

Годы	Прибывшие	Выбывшие	Миграционный баланс
2000	11122	14034	- 2912
2005	10684	14041	- 3357
2010	11600	12742	- 1142
2011	11464	12770	- 1306
2012	12007	13528	- 1521
2013	13081	12326	+ 755
2014	10976	12055	- 1079
2015	11748	13027	- 1279
2016	12925	143388	- 1463
2017	14456	16134	- 1678
2018	11936	13824	- 1888
2019	10378	13283	-2905
2020	8456	19518	-11062
2021	11911	17699	-5788
2022	9 577	13 767	-4190

Из данных таблицы известно, что сальдо миграции в нашей республике и области отрицательное, а в структуре населения вес эмигрантов по сравнению с иммигрантами составляет большинство.

В 2017 году количество иммигрировавших в Сурхандарьинскую область составило 14 456 человек, количество выехавших – 16 134, а сальдо миграции сложилось отрицательным – 1 678 человек.

В 2021 году количество переехавших и покинувших нашу республику людей было самым высоким. В этом году число иммигрировавших в нашу республику составило 256 814 человек, а число эмигрантов – 275 079 человек. Сальдо миграции сложилось отрицательным – 18 265 человек.

В 2022 году количество иммигрировавших в Сурхандарьинскую область составило 9 577 человек, количество эмигрантов – 13 767 человек. Сальдо миграции составило отрицательное 4190 человек.

Таблица 2

Миграция населения Сурхандарьинской области, чел.

Т/г	Города и районы	Количество иммигрантов		Количество эмигрантов		Миграционный баланс	
		2021	2022	2021	2022	2021	2022
	По области:	11911	9577	17704	13767	-5793	-4190
1	г. Термез	5298	3214	2961	1503	2337	1711
2	Алтынсайский	20	210	884	682	-864	-472
3	Ангорский	298	610	784	689	-486	-79
4	Бандиханский	599	298	481	329	118	-31
4	Байсунский	322	306	884	737	-562	-431
5	Музрабатский	515	406	973	856	-458	-450
6	Денауский	841	671	1750	1464	-909	-793

7	Джаркурганский	343	543	1250	1039	-907	-496
8	Кумкурганский	405	410	1443	1129	-1038	-719
9	Кизирикский	387	388	941	870	-554	-482
10	Сариасийский	425	342	1172	903	-747	-561
11	Термезский	917	826	1161	897	-244	-71
12	Узунский	406	378	1066	859	-660	-481
13	Шерабадский	563	583	919	954	-356	-371
14	Шурчинский	572	392	1035	856	-463	-464

Таблица составлена авторами на основе информации официального сайта управления статистики Сурхандарьинской области «Сурхонстат.уз».

Анализ данных таблицы показывает, что существенных различий в миграционном движении населения районов области нет. Сальдо миграции имеет отрицательный показатель во всех сельских округах, за исключением города Термеза – областного центра. То есть количество эмигрантов превышает количество иммигрантов. Особенно в Денауском, Кумкурганском, Сариасийском, Джаркурганском районах сальдо миграции отрицательное и является высоким показателем. Рост населения региона был самым высоким за последние годы вместе с Кашкадарьинской областью.

На рост населения стран и регионов влияют также процессы механического перемещения населения. В 2022 году миграция населения в регионе имела отрицательное сальдо. На уровне районов только административный центр Термез имел положительное сальдо миграции населения. Во всех остальных сельских округах области сальдо миграции было отрицательным. Особенно высоким оно было в Денауском, Кумкурганском, Сариасийском, Джаркурганском, Кызырикском, Узунском районах и средним в Алтынсайском, Шурчинском, Музрабатском Байсунском районах, остальных Шерабадском, Ангорском районах. Низкий показатель имелся в Термезском, Бандиханском районах.

Подводя итог, к районам с высоким приростом населения области относятся Денауский, город Термез, Кумкурганский, Джаркурганский, Шурчинский районы. Показатель остальных округов был значительно ниже.

В 2017 году число родившихся в регионе составило 64,4 тыс., число умерших – 11,3 тыс., миграционный баланс – минус 2,3 тыс. Общий прирост населения составил 50,8 тыс. человек или естественный прирост по сравнению с предыдущим годом (2016) составил 1,02 процента.

К 2018 году число родившихся в регионе составило 68 000, число умерших – 10 700, естественный прирост – 57 400. В этом году сальдо миграции составило -2,2 тыс. человек, общий прирост населения составил 55,2 тыс. человек.

В 2022 году число родившихся в области составило 81 598 человек, число умерших – 13 853 человека, естественный прирост – 67 745 человек.

Причин высокой рождаемости в регионе несколько. Среди них большое количество представителей местных национальностей (узбеки, таджики) с высокой склонностью к многодетности в национальной структуре общей численности населения, низкие уровни урбанизации и занятости населения, а также некоторые традиции и другие факторы.

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*Абдуназаров Х.М., кандидат географических наук
доцент
кафедра географии
Термезский государственный университет
Узбекистан, Термез
Ниёзов Х.М.
старший преподаватель
кафедра географии
Термезский государственный университет
Узбекистан, Термез*

СОСТАВ НАСЕЛЕНИЯ СУРХОНДАРЬИНСКОЙ ОБЛАСТИ

Аннотация. В данной статье изучен половой и возрастной, а также этнический состав населения Сурхандарьинской области. В частности, описаны изменения в составе населения региона за годы независимости.

Ключевые слова: Половой состав населения, возрастной состав населения, национальный состав населения.

*Abdunazarov H.M., candidate of geographical sciences
associate professor
Department of Geography
Termez State University
Uzbekistan, Termez
Niyozov Kh.M.
senior lecturer
Department of Geography
Termez State University
Uzbekistan, Termez*

COMPOSITION OF THE POPULATION OF SURKHONDARYO REGION

Annotation. This article examines the gender, age, and ethnic composition of the population of the Surkhondaryo region. In particular, changes in the composition of the region's population over the years of independence are described.

Key words: Sex composition of the population, age composition of the population, national composition of the population.

Разделение населения по половому признаку является одним из важнейших демографических аспектов населения и одним из основных критериев воспроизводства населения. В разные исторические периоды

наблюдались разные различия в половом составе населения региона. Например, в середине прошлого века, точнее, в период после Второй мировой войны, для населения региона характерно уменьшение количества мужчин по сравнению с женщинами. К 50-м годам прошлого столетия различия в половой структуре населения региона были снижены.

В настоящее время существенных различий в гендерном составе населения региона нет. Из данных таблицы 1 ниже известно, что в 2015 году общая численность населения региона составляла 1170,1 тыс. женщин и 1188,2 тыс. мужчин. Мужчин было на 18 100 больше, чем женщин. В этом году доля женщин в общей численности населения составила 49,7 процента, а доля мужчин – 50,3 процента. В 2019 году общая численность населения региона составила 1271,8 тыс. женщин и 1298,1 тыс. мужчин.

Таблица №1

**Половой состав населения Сурхандарьинской области
(тысяч человек)**

№	Годы	Общая численность населения	В том числе		В процентах от общего	
			Женщины	Мужчины	Женщины	Мужчины
1	2014	2358,3	1170,1	1188,2	49,7	50,3
2	2015	2411,5	1125,1	1216,4	49,6	50,4
3	2016	2462,3	1219,8	1242,5	49,5	50,5
4	2017	2514,2	1244,9	1269,3	49,5	50,5
5	2018	2569,9	1271,8	1298,1	49,5	50,5
6	2019	2629,3	1301,5	1327,8	49,5	50,5
7	2020	2681	1326,2	1354,8	49,5	50,5
8	2021	2743,2	1356,2	1387	49,4	50,6
9	2022	2806,7	1387,2	1419,5	49,4	50,6

Таблица составлена авторами на основе информации официального сайта управления статистики Сурхандарьинской области «Surhostat.uz».

В 2022 году количество женщин в общей численности населения региона составило 1387,2 тыс., мужчин – 1419,5 тыс. человек.

Анализируя население региона по возрастным группам, можно сделать следующие выводы. По состоянию на 1 января 2023 года 34,7 процента общей численности населения региона моложе трудоспособного возраста, 56,1 процента трудоспособного возраста и 9,3 процента людей старше трудоспособного возраста. Существенных различий в доле возрастных групп населения в общей численности населения по городам и районам нет. Однако Деновский район выделяется по количественным показателям по возрастным группам населения. В районе проживает 15,3% населения моложе трудоспособного возраста, 14,2% трудоспособного возраста и 14,3% населения старше трудоспособного возраста.

Формирование национального состава населения каждой страны или региона происходит на основе ряда природных, экономических,

социальных, исторических и политических факторов. В частности, миграционные процессы играют решающую роль в формировании национального состава населения регионов.

В эпоху глобализации активизация миграционных процессов оказывает существенное влияние на состав населения различных регионов и стран. После формирования национального состава населения Сурхандарьи он создавался на основе исторических политических процессов, происходивших на протяжении полутора веков. Во второй половине XIX века, с оккупацией Средней Азии Россией и последующим осуществлением Октябрьского переворота 1917 года в России, русские подданные начали мигрировать в Среднюю Азию и на территории нашей нынешней республики. В годы Второй мировой войны в результате массового перемещения населения из районов, где шла война, национальный состав населения региона изменился в результате переселения в нашу республику представителей разных национальностей.

Таблица №2

**Национальный состав населения Сурхандарьинской области
2021 год**

№	нации	Население, чел.	Доля от общей численности населения, в %
1	узбеки	2264979	84,49
2	таджики	334120	12,46
3	туркмены	32925	1,23
4	русские	21324	0,80
5	татары	6,960	0,26
6	украинцы	3545	0,13
7	цыгане	3276	0,12 %
8	казахи	2719	0,10
9	белорусы	1502	0,06
10	азербайджанцы	978	0,04 %
11	корейцы	734	0,03 %
12	армяне	306	0,01 %
13	евреи	220	0,01 %
14	молдаване	210	0,01 %
15	каракалпаки	194	0,01 %
16	киргизы	159	0,01 %
17	грузины	157	0,01 %
18	другие нации	6,492	0,22 %

Источник: <https://ru.wikipedia.org/wiki/Uzbekistan>

Из данных таблицы 2 выше известно, что в настоящее время в Сурхандарьинской области проживают представители более 20 национальностей. В 2021 году узбеки составляли 84,5 процента от общей численности населения региона, таджики - 12,4 процента, туркмены - 1,2 процента, русские - 0,8 процента, татары - 0,2 процента, украинцы - 0,1

процента и казахи - 0,1 процента. Остальные национальности (белорусы, азербайджанцы, корейцы, каракалпаки, кыргызы и другие национальности) имеют небольшую долю.

Имеются существенные различия в размещении проживающих на территории области этносов по административным районам. Узбеки проживают во всех районах области. 14,3% всех узбеков, проживающих в области, проживают в Деновском районе, 9,9% - в Кумкурганском районе, 9,3% - в Жаркурганском районе, 9,1% - в Шорчинском районе. Представители таджикской национальности в основном проживают в горных, северных районах области. 21,4% от общего числа таджиков региона проживают в Сариосии, 17,8% в Деновском районе, 15,7% в Узунском районе и 17,7% в Байсуне. Туркменские национальности проживают в южных районах области на берегах Амударьи, в Термезском, Ангорском, Музработском районах и в городе Термез. 29,7% туркмен, проживающих в регионе, проживают в Термезском районе, 29,6% в городе Термезе, 16,1% в Ангорском районе, 8,2% в Музработском районе. К поселениям туркменских национальностей можно отнести села Хушман Музработского района, Новшахар Ангорского района, Халкабад и Паттакесар, Джойджангал Термезского района. Большая часть остальных национальностей проживает в городе Термезе – административном центре области. В том числе в городе проживают 74,5% корейцев, 64,4% русских, 64,4% украинцев, 62,4% белорусов, 59,0% татар, 37,5% азербайджанцев, 35,8% каракалпаков, 36,8% казахов. В этом плане город Термез отличается статусом многонационального города по сравнению с другими сельскими районами области.

Доля узбеков в общей численности населения Шорчинского, Жарорганского, Кумкорганского, Бандиханского, Шерабадского, Алтынсойского, Ангорского районов составляет более 90 процентов. По доле узбеков Термезский, Деновский и Музработские районы находятся на среднем уровне, а следующие места занимают Узунский район, город Термез, Сариосинский и Байсунский районы.

Таджики составляют 42,2% от общей численности населения Байсунского района, 33,8% - Сариосийского района, 30,2% - Узунского района, 15,9% - Музробадского района, 15,6% - города Термеза, 15,2% - Деновского района.

За последние 25-30 лет национальный состав населения региона существенно изменился. Можно привести пример изменений, связанных с распадом бывшего СССР в 90-х годах прошлого века.

За последние 30 лет вклад узбеков, представителей местного населения, в регионе значительно увеличился. В 1989 г. их доля в общей численности населения области составляла 79,5%, в 1993 г. - 79,5%, в 1999 г. - 82,5%, в 2019, 2021 гг. - 84,4%.

В 1989 и 1993 годах доля таджикских национальностей в общей численности населения составляла 12,9 процента, в 1999 и 2019 годах — 12,3 процента, а в 2021 году — 12,4 процента.

В начале 90-х годов прошлого века доля русских национальностей в национальной структуре населения региона составляла 3,0 процента, в 1999 году — 1,8 процента, а в 2019 и 2021 годах — 0,8 процента. Большая часть российских граждан иммигрировала в Россию и ряд стран СНГ на постоянное место жительства в начале 90-х годов прошлого века. Доля местных этнических туркмен в общей численности населения не очень велика. В 1993 году доля туркменских национальностей составляла 1,5 процента, в 1999 году — 1,3 процента, а в 2019 и 2021 годах — 1,2 процента. Число представителей других национальностей в общей численности населения невелико. Если кратко, то в национальном населении региона высокий процент узбеков и таджиков, несколько меньший процент туркмен и небольшой процент русских, татар, украинцев, казахов и представителей других национальностей.

После обретения независимости Республики Узбекистан, следуя принципам мира и согласия между народами, представители всех национальностей, проживающих в нашей стране, живут в мире и согласии, как единая семья. Созданы национально-культурные центры, прославляющие культурное наследие разных национальностей и народов, созданные особенно в годы независимости.

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*Абдуназаров Х.М., кандидат географических наук,
доцент
кафедра географии
Термезский государственный университет
Узбекистан, Термез
Ниёзов Х.М.
старший преподаватель
кафедра географии
Термезский государственный университет
Узбекистан, Термез*

**ГЕОГРАФИЧЕСКИЕ ФАКТОРЫ, ВЛИЯЮЩИЕ НА
ТЕРРИТОРИАЛЬНОЕ РАЗМЕЩЕНИЕ
СЕЛЬСКОХОЗЯЙСТВЕННЫХ ОТРАСЛИ СУРХАНДАРЬИНСКОЙ
ОБЛАСТИ**

Аннотация. В данной статье на научной основе изучены географические факторы, влияющие на территориальное расположение отраслей сельского хозяйства Сурхандарьинской области. В частности, в статье раскрываются роль и значение агроклимата, земельных и водных ресурсов в региональном размещении и развитии региональных сельскохозяйственных производств.

Ключевые слова: Агроклимат, земельные и водные ресурсы, положительная полезная температура, земельный фонд, гидротехнические сооружения, сельскохозяйственные регионы.

*Abdunazarov H.M., candidate of geographical sciences
associate professor
Department of Geography
Termez State University
Uzbekistan, Termez
Niyozov Kh.M.
senior lecturer
Department of Geography
Termez State University
Uzbekistan, Termez*

**GEOGRAPHICAL FACTORS AFFECTING THE TERRITORIAL
LOCATION OF AGRICULTURAL INDUSTRIES IN SURKHANDARYA
REGION**

Annotation. In this article, geographical factors influencing the territorial location of agricultural sectors in the Surkhandarya region are studied on a

scientific basis. In particular, the article reveals the role and importance of agroclimate, land and water resources in the regional location and development of regional agricultural production.

Key words: Agroclimate, land and water resources, positive beneficial temperature, land fund, hydraulic structures, agricultural regions.

Сурхандарьинская область расположена в самой южной части нашей республики. Такое географическое положение региона оказывает влияние на формирование его экономики, в том числе на региональный состав отраслей сельского хозяйства.

Сурхандарья расположена на юге, для нее характерно большое количество годовой суммы солнечной радиации (160 кл. на 1 см² поверхности), а также солнечные дни и большое количество положительных температур. Кроме того, вместе с факторами рельефа здесь сформировался уникальный сухой субтропический климат. К западу от него расположена гора Кохитанг (высота 3137 м), являющаяся юго-западным продолжением горы Бойсун, к северо-западу — гора Бойсун, к северу — Хисарские горные хребты, к востоку — хребты Боботог. Южная часть провинции представляет собой равнину и через Амударью граничит со страной Афганистан.

Рельеф региона разнообразен и сложен, он оказывает сильное влияние на формирование почвенного покрова, использование сельскохозяйственной техники, строительство и размещение предприятий перерабатывающего и нематериального производства. Морфологически рельеф региона представлен равнинами, долинами, реками, холмами и высокогорьями, разделен на высокие хребты. Их условно можно разделить на горную и равнинную части. Равнинная часть региона включает Сурхан-Шерабадскую долину, Шерабадскую степь и многочисленные долины горных рек. Сурханско-Шерабадская долина интенсивно эксплуатируется по сравнению с горной и предгорной зоной, где «плотно» расположены производительные силы.

Рассматриваемая долина с трех сторон окружена высокими горными хребтами. От этих хребтов берут начало такие реки, как Топалангдарья, Сангардакдарья, Ходжайпак, Шерабаддарья, являющиеся источниками орошения сельскохозяйственных культур региона. В долине их несколько.

строительство водохранилищ, в том числе Южно-Сурханского, Учкизильского, Октепинского, Топалангского водохранилищ, ряда магистральных каналов, привело к быстрому расширению сельскохозяйственных пашен и улучшению мелиорации земель.

Горная часть региона состоит из ряда параллельных гор разной высоты, ориентированных меридионально с севера на юг. Он окружен Хисарским хребтом в широтном направлении с севера. Здесь же расположена самая высокая вершина Узбекистана – Хазрат Султан (4643 м).

Хисарский хребет спускается на юго-запад и разделяется на несколько рукавов. Они идут параллельно друг другу с севера на юг.

В части Сурхандарьинской области, граничащей с Кашкадарьинской областью, расположена гора Чаччар. Хребты восточной части горы Бойсун представляют собой относительно длинные хребты. Гора Бойсун отделена от горы Кохитанг коридором «Железные ворота», образованным рекой Шерабад. Кохитанг – юго-западное продолжение горного хребта Байсун, который находится на территории Туркменистана.

Через территорию соединяется с Амударьей. К востоку от хребта Кохитанг, параллельно ему, расположены сильно эродированные возвышенности (низины), а именно хребет Келиф-Шерабад.

Сурханские горы восточнее горы Бойсун простираются до реки Шерабад в юго-западном направлении, а в восточном направлении постепенно понижаются и сливаются с равниной Сурхандарьинской долины.

В восточной части района расположен безводный, невысокий хребет Боботог Хисарского хребта, вытянутый с севера на юг. В целом 70% территории Сурхандарьинской области занимает предгорная и горная зоны. Здесь «горный коэффициент» (выражение А.Солиева) гораздо выше, чем в других регионах республики. Например, в Узбекистане этот показатель составляет 0,21, в Сурхандарьинской области – 0,70.

Исходя из этого, ученый Т. Джумаев (1989), изучавший горы нашей страны, делит территорию региона на три части:

1. Горно-пастбищная (адырская) зона 0,7 млн.чел. га или 34% от общей площади региона представляет собой;
2. Горно-пастбищная зона занимает 103 тыс. га или 5% от общей площади региона;
3. Высокогорная зона составляет 144 тыс. га, что составляет 7% от общей площади.

Горные районы Сурхандарьинской области считаются основной кормовой базой отрасли пастбищного животноводства, в горных районах имеются благоприятные возможности для развития виноградарства, плодовоовощеводства и частично хлопководства.

Также Т. Джумаев делит административные районы, расположенные в горной части Сурхандарьинской области, на 2 группы. К районам первой группы, состоящим из гор и равнин, относятся Сариосийо, Денов, Узун, Алтынсой, Шерабад, Шорчи. В горных районах этих округов было создано множество специализированных садоводчески-виноградарских, пастбищных животноводческих и других хозяйств. Например, Алтынсойский район – единственный специализированный виноградарский район региона. На его долю приходится 37% существующих виноградников региона и 53% общего урожая.

Байсунский район включен в состав административных районов горного и предгорного типа. Здесь созданы условия для развития горно-пастбищного животноводства, зерноводства, садоводства и виноградарства. На территории района расположено 19% всей кормовой пашни, 25% овец и коз.

В равнинной части региона созданы благоприятные условия для развития сельскохозяйственных отраслей, в частности ирригационного земледелия. Например, Сурхан-Шерабадская долина с севера, северо-запада и востока окружена высокими горами, в результате чего формируется уникальный субтропический климат из-за того, что сюда не могут проникнуть холодные воздушные массы. Это позволило выращивать цитрусовые и тонковолокнистый хлопок с относительно продолжительным вегетационным периодом. Климат Сурхандарьинской области характеризуется низкой и короткой зимой и жарким и продолжительным летом. С мая по ноябрь, иногда до декабря, в регионе почти не бывает осадков. Высокие температуры воздуха и почвы характерны для равнинных регионов, считающихся сельскохозяйственными. Среднегодовая температура воздуха здесь составляет 14,5-18,0С.

Термальные ресурсы равнин позволили выращивать теплолюбивые сельскохозяйственные культуры, в том числе сорта хлопчатника с длительным вегетационным периодом.

Период, создающий условия для развития теплолюбивой сельскохозяйственной культуры, в частности хлопка, в регионе длится в среднем от 226 до 266 дней.

Сумма полезных температур в равнинной части региона составляет 55 000 градусов, сумма полезных температур за весь период роста растения более 1500 0 градусов.

Наряду с тепловыми ресурсами при выращивании хлопка важное значение имеет количество осадков и их распределение по сезонам. Лето в Сурхандарьинской области жаркое и сухое, большая часть осадков выпадает весной. В равнинной части региона осадков выпадает сравнительно меньше. Например, в Термезе выпадает 133 мм осадков, в Денове - 360 мм, в Байсуне - 445 мм, в горных районах - 625 мм.

Л.Н.Бабушкин и Н.А.Когай разделили Сурхандарьинскую область на три природно-географические области: Нижне-Сурханскую, Средне-Сурханскую и Верхне-Сурханскую.

Основные агроклиматические показатели Нижнего или Южно-Сурханского природно-географического региона иные по сравнению со Средней (Центральной) и Верхней (Северной) природно-географическими районами. Например, средняя температура июля в нижнем Сурхане +31,5; +32 градуса, а в других регионах этот показатель не превышает +29 градусов, количество осадков в 1,5-2 раза меньше, чем в других регионах, а сумма полезных температур несколько выше.

Сурхандарья и Шерободарья являются крупнейшими реками региона и используются для орошения всех посевных площадей региона. По расчетам В. Л. Шульца и Л. И. Шалатовой (1965) площадь водосбора Сурхандарьи и Шерободарьи составляет 8406 кв/км, а модуль стока - 13,2 м/сек кв/км. Все реки региона гидрографически относятся к бассейну Амударьи.

Сурхандарья образуется в результате слияния рек Топалангдарья и Каратогдарья. Топалангдарья более чем в два раза беднее Каратогдарьи, ее средний многолетний расход воды в устье гор составляет 52 м³/сек, а Каратогдарья – 23 м³/сек.

В реках области в октябре-феврале наблюдается снижение водопотребления, а в марте происходят разливы воды, особенно в мае, подъем воды находится на самом высоком уровне.

К июню вода начнет убывать. Разнообразие режима таких рек затрудняет их использование для орошения.

К концу 1950-х годов общая мощность воды крупнейших рек региона составляла 800 млн. куб.м. был кубический метр

Южно-Сурханское водохранилище введено в эксплуатацию в 1964 году. Его площадь 65,0 кв. км, средняя глубина 12,3 м. немного раньше, то есть в 1960 году, емкость воды составляла 160 млн. куб м., площадь 10,0 кв.км. Построено Учкизильское водохранилище (Хикматовское, Сирлибоево и др., 2000, с. 74-75). Также объем составляет 12,8 млн. Также достроены Дегрез и другие резервуары кубометром. В результате за счет освоения новых земель расширились орошаемые пашни, в экстенсивном порядке выросли объемы выращивания хлопка. По использованию в хозяйственных целях почвенные ресурсы делятся на почвы горной и предгорной зоны и почвы равнинной зоны. Сероземы (светлые, равнинные, темные) распространены от горных равнин до высокогорья. На равнинах региона распространены светлые сероземы с содержанием гумуса 1-1,5%, а на участках выше 500 метров над уровнем моря - сероземы обыкновенные с содержанием гумуса 1,5-2%. В юго-западных районах также встречаются засоленные почвы и бесплодные сероземы. Расположенные в южной части области массивы Хатинработ и Каттакум имеют песчаные пустынные почвы, а в низовьях Сурхандарьи и Амударьи – аллювиальные луга и лугово-болотные почвы. В зоне орошаемого земледелия Сурхан-Шерабадской долины сероземы изменили свои природные характеристики и стали культурными почвами.

Таким образом, подводя итог, можно сказать, что природные условия региона по-разному влияют на размещение и развитие сельскохозяйственных производств. Например, агроклиматические условия здесь создают благоприятные условия для выращивания тонковолокнистого хлопка с длительной вегетацией, садоводства и виноградарства. В то же время теплый местный «афганский» ветер, дующий с юга, отрицательно

влияет на выращивание сельскохозяйственных культур и их экологию. Также под воздействием ветровой эрозии ухудшается мелиорация земель и ускоряется процесс опустынивания.

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*Абдуназаров Х.М., кандидат географических наук
доцент
кафедра географии
Термезский государственный университет
Узбекистан, Термез
Ниёзов Х.М.
старший преподаватель
кафедра географии
Термезский государственный университет
Узбекистан, Термез*

РАССЕЛЕНИЕ НАСЕЛЕНИЯ СУРХАНДАРЬИНСКОЙ ОБЛАСТИ В СЕЛАХ И ГОРОДАХ

Аннотация. В данной статье изучены расселение населения Сурхандарьинской области в городах и селах, территориальный состав городских и сельских поселений, а также процессы урбанизации.

Ключевые слова: город, село, населенные пункты, урбанизация, география сельской местности, исследования.

*Abdunazarov H.M., candidate of geographical sciences
associate professor
Department of Geography
Termez State University
Uzbekistan, Termez
Niyozov Kh.M.
senior lecturer
Department of Geography
Termez State University
Uzbekistan, Termez*

RESETTLEMENT OF THE POPULATION OF SURKHANDARYA REGION IN VILLAGES AND CITIES

Annotation. This article studies the settlement of the population of the Surkhandarya region in cities and villages, the territorial composition of urban and rural settlements, as well as the processes of urbanization.

Key words: city, rural areas, settlements, urbanization, rural geography, research.

Города и сельские поселения образовались в результате социального и территориального разделения труда в ходе длительного исторического развития человеческого общества. Городские и сельские поселения

отличаются друг от друга степенью специализации жителей в отраслях экономики. Обычно города густонаселены, эти места отличаются широким распространением городского образа жизни, наличием многоэтажной жилой застройки, развитием предприятий промышленного производства, транспорта и других современных отраслей инфраструктуры. Большая часть населения, проживающего в сельских поселениях, занимается сельским хозяйством.

Деревни являются территориальными, социальными и историческими единицами населения. Деревни — это поселения с более давней историей по сравнению с городами. Когда речь идет о сельской местности, то понимают территории, находящиеся за пределами города и экономически развитые. Известно, что в эпоху глобализации, когда современный научно-технический прогресс находится на высоком уровне, важно определить различия в социальном образе жизни деревень и городов. В частности, городская жизнь быстро впитывает инновации в области науки и техники. Здесь быстро развиваются наука и производство.

Села, издавна сохраняющие культуру человеческой цивилизации, играют несравнимую роль в передаче национального культурного наследия разных народов будущим поколениям. В этой связи не будет ошибкой сказать, что сельская местность является «музеем цивилизации, культуры и ценностей человечества» на нашей планете.

География сельской местности в нашей республике в годы независимости стала постепенно развиваться. Особенно в развитие этой области большой вклад внес известный географ и учёный профессор А. Солиев. Под руководством профессора А. Солиева многие научные исследователи защитили диссертации по географии сельской местности. Также изданы монографии и учебные пособия.

По мнению А.С. Солиева, села являются «неудачной» областью в этой науке и менее изучены, чем города. В частности, в монографии «Села Узбекистана», написанной ученым совместно с М. Назаровым в 2009 году, посвященной «Году развития и благосостояния села», проанализировано географическое описание сельских поселений, расположенных в различных экономических районах нашей республики. Среди них на научной основе изучены долинные села Андижанской области, села-оазисы Хорезмской области, пустынные села Бухарской области, горные села Сурхандарьинской области.

В Сурхандарьинской области, южном регионе Республики Узбекистан, важную роль в территориальном расположении населенных пунктов играют природные условия, в частности климат, рельеф и гидрологические бассейны. Территория района с трех сторон окружена горами разной высоты, только южная часть открыта реке Амударье, поднимается от уровня моря с юго-запада (равнина) на северо-восток (горы).

Более 70 процентов площади области составляют горные районы (следовательно, коэффициент «холмистости» равен 0,70). В области населенные пункты плотно расположены в Сурхан-Шерабадской долине, которая с экономической точки зрения сильно эксплуатируется.

В области большая часть сельских населенных пунктов расположена на берегах рек Сурхан и Шерабад, а также дороги Шерабад-Термиз-Денов и железной дороги Термиз-Денов, являющейся продолжением Великого Узбекского тракта. Кроме того, сельские поселения были созданы в 1950-60-х годах прошлого столетия при освоении земель Шерабадского заповедника, в Шерабадском, Музработском, Ангорском, Кызырикском районах. По состоянию на 1 января 2023 года в области насчитывается 859 сельских населенных пунктов. Это 75,1 процента от общего количества поселений области.

В состав районов области, образованных в 1926 году, входят Деновский, Сариосийский, Термезский и Шерабадский районы.

Самыми последними районами области были Ангорский район, отделенный от Термизского района в 1979 году, Олтинсойский район, отделенный от Шорчинского района в 1981 году, Узунский район, отделенный от Сариосийского района в 1991 году, и Бандихонский район, отделенный от Кызырикского района в 1992 году. Бандихонский район был включен в состав Кызырикского района в 2011 году, а в 2020 году район был реорганизован. Крупнейшими по площади являются Байсунский, Сариосийский, Шерабадский, Кумкурганский районы, которые в совокупности занимают 12,6 тысяч квадратных километров или 62,6% площади региона. По состоянию на 1 января 2023 года численность населения этих сельских округов составляет 799,7 тыс. человек, или 28,4% населения региона.

По количеству сельских округов области наибольшее количество сельских населенных пунктов находится в Сарысянском районе, 106 - в Деновском районе, 96 - в Шерабадском районе. В среднем 61,3 сельских населенных пункта соответствуют существующим 14 сельским округам области.

По данным на 2023 год, в Сурхандарьинской области 8 городов и 112 поселки городского типа. Из 8 городов только Термез имеет статус города областного подчинения. Остальные 7 городов находятся в подчинении района. В регионе 35,5 процента населения проживает в городах. Уровень урбанизации региона является низким показателем, и в этом отношении область опережает только Хорезмскую область в нашей республике. (33,2%) (таблица).

Уровень урбанизации региона был очень низким даже в прошлом веке. Для сравнения, доля городских жителей в общей численности населения региона была следующей. Например, в 1959 г. она составляла

15,4%, в 1970 г. - 16,0%, в 1979 г. - 19,3%, в 1989 г. - 19,5%. Этот показатель существенно изменился даже к началу 1990-х гг.

Уровень урбанизации составлял 19,3% в 1990 году, 19,1% в 1991 году, 18,9% в 1992 году и 20,2% в 1993 году. В 2008 году уровень урбанизации региона составил 19,1%.

По состоянию на 1 января 1994 года в области действовало 9 городов, 7 поселков городского типа, 109 сельских советов, 855 сельских поселений.

Таблица №1

**Рост городского населения и уровень урбанизации в
Сурхандарьинской области**

	Годы												В 2022 году в % к 1926 году
	19 26	19 39	1959	1970	1979	1989	19 98	20 09	2010	2015	2018	2022	
Общая численность населения региона. Тысяча человек	20 3,0	31 5,0	422, 3	662, 0	894, 7	1253 ,8	16 87, 9	20 75, 0	2175 ,1	2411 ,5	2569, 0	2806 ,5	13,8 р
Из этого: горожан в тысяче человек	16, 6	29, 2	65,0	106, 2	172, 3	244, 4	33 9,2	76 7,9	794, 7	861, 1	910,6	1016 ,8	61,2 р
Уровень урбанизации в процентах	8,2	5,4	15,4	16,0	19,3	19,5	20, 9	37, 0	36,5	35,7	35,4	36,2	4,4 р

*Таблица составлено по данным Управления статистики
Сурхандарьинской области на основе информации официального сайта
"Surxanstat.uz"*

На основании решения Кабинета Министров Республики Узбекистан от 13 марта 2009 года № 68 на основании объявления 2009 года Годом «Развития и процветания села» в нашей стране многие сельские поселения получили статус городов.

107 сельских населенных пунктов Сурхандарьинской области присвоен статус городов, а их число достигло 114. Агророгродки,

специализирующиеся на аграрном секторе региона, расположены во всех сельских округах.

Если рассматривать расположение существующих посёлков городского типа по районам, то они распределяются следующим образом:

Алтынсойский (14), Деновский и Ангорский (по 11), Кумкурганский и Музработский (по 10), Термезский, Узунский, Шорчинский районы (9), Шерабадский (7), Бойсунский (5), Расположен в Джаркурганском районах. и Кизырик (4), Сариясия (по 3), Бандихон (по 1).

Из данных табл. 1 выше известно, что в 2022 г. общая численность населения региона увеличилась в 13,8 раза по сравнению с предыдущими анализируемыми годами (1926 г.). При этом население города за исследуемые годы увеличилось в 61,2 раза. После 1959 года население города постепенно увеличивалось.

Население города увеличилось на 179 400 человек за 30 лет с 1959 по 1989 год. Именно в эти периоды были созданы новые поселения с освоением сухих серых земель Сурханско-Шерабадской долины, достройкой и вводом в эксплуатацию многих водохранилищ и гидротехнических сооружений. Также построены и введены в эксплуатацию предприятия легкой и пищевой промышленности по переработке сельскохозяйственной продукции. Примерами таких предприятий являются хлопкоочистительные, молочно-мясные, маслоэкстракционные, хлопко-молочные, хлопкоочистительные предприятия в Деновском районе, мукомольные, хлопкоочистительные предприятия в Шорчинском районе, хлопкоочистительные предприятия почти во всех других райцентрах, которые мы можем показать.

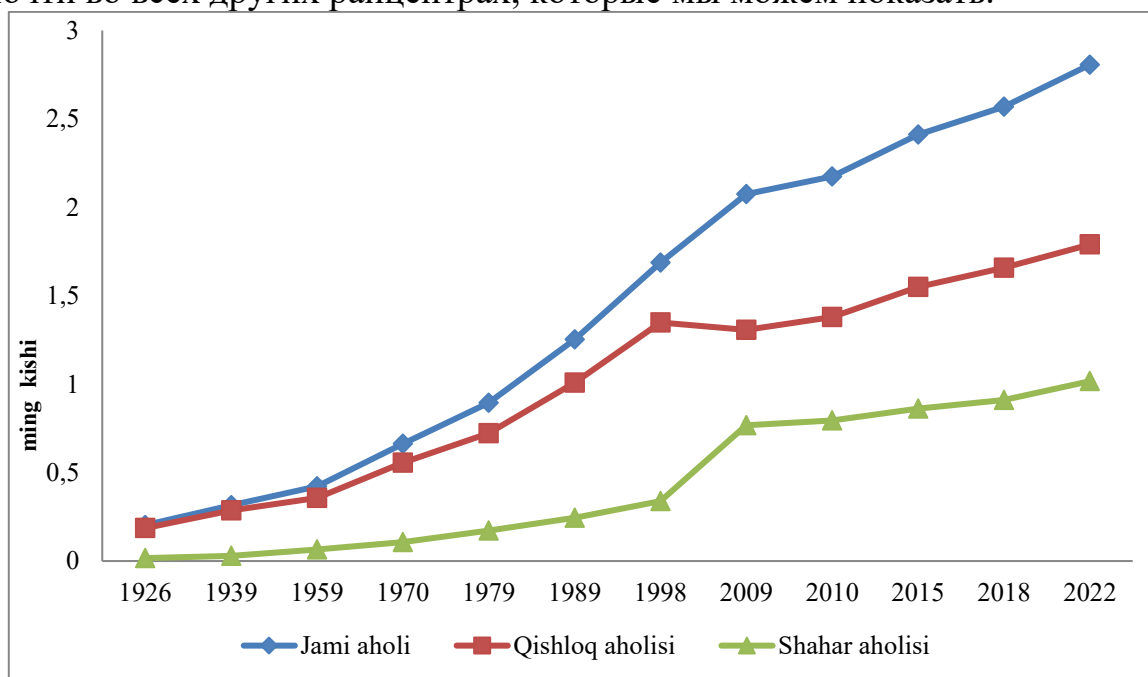


Рисунок 1. Динамика роста населения Сурхандарьинской области

Диаграмма составлена авторами на основе данных официального сайта Surkhostat.uz Управления статистики Сурхандарьинской области.

В 2022 году население областных городов увеличилось на 1 млн 200 человек по сравнению с 1989 годом. В частности, в 2009 году, объявленном годом «Развития и процветания села», население города увеличилось на 523,5 тысяч человек по сравнению с 1989 годом. За эти годы уровень урбанизации увеличился на 17,5%. В 2022 году количество жителей города увеличилось на 248,9 тыс. человек по сравнению с 2009 годом. Уровень урбанизации снизился на 0,8% (рисунок 1).

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*Абдуназаров Х.М., кандидат географических наук
доцент
кафедра географии
Термезский государственный университет
Узбекистан, Термез
Ниёзов Х.М.
старший преподаватель
кафедра географии
Термезский государственный университет
Узбекистан, Термез*

РАЗВИТИЕ УГОЛЬНОЙ ПРОМЫШЛЕННОСТИ В СУРХАНДАРЬИНСКОЙ ОБЛАСТИ

Аннотация. В данной статье рассмотрено становление и развитие угольной промышленности Сурхандарьинской области, в том числе становление угольной промышленности региона, увеличение объемов добычи угля за счет ретехнологической модернизации отрасли на основе привлечения полезных ископаемых. иностранные инвестиции в угольную отрасль за годы независимости.

Ключевые слова: Горнодобывающая промышленность, накопление топливно-энергетических ресурсов, специализация, условное топливо, модернизация, диверсификация.

*Abdunazarov H.M., candidate of geographical sciences
associate professor
Department of Geography
Termez State University
Uzbekistan, Termez
Niyozov Kh.M.
senior lecturer
Department of Geography
Termez State University
Uzbekistan, Termez*

DEVELOPMENT OF THE COAL INDUSTRY IN SURKHANDARYA REGION

Annotation. This article examines the formation and development of the coal industry in the Surkhandarya region, including the formation of the region's coal industry, an increase in coal production through re-technological modernization of the industry based on the attraction of minerals. foreign investments in the coal industry over the years of independence.

Key words: Mining industry, accumulation of fuel and energy resources, specialization, standard fuel, modernization, diversification.

Исходя из задач, определенных в принятой в нашей стране Стратегии развития Республики Узбекистан на 2022-2026 годы, актуальным является повышение благосостояния населения за счет повышения экономической компетентности регионов в экономическом развитии. и социальное развитие регионов и регионов с эффективным использованием имеющихся у них местных природных, экономических и социальных ресурсных возможностей, указанных в качестве задачи.

В связи с этим, учитывая, что экономические и социальные потребности в продукции топливно-энергетического комплекса с каждым днем увеличиваются, необходимо увеличить производство видов топлива и объемы производства электроэнергии за счет коренной модернизации и диверсификация этой отрасли.

Согласно 22-й цели главы 3 новой стратегии развития Узбекистана на 2022-2026 годы, озаглавленной «Ускоренное развитие национальной экономики и обеспечение высоких темпов роста», «Продолжение промышленной политики, направленной на обеспечение стабильности национальной экономики и увеличение доли промышленности в валовом внутреннем продукте и производстве промышленной продукции» планируется увеличить ее объем в 1,4 раза.

В последние годы возрастает значение угольной отрасли в топливной отрасли Сурхандарьинской области.

Становление и развитие угольной промышленности региона относится к 30-40-м годам 20 века.

Разведка угольных шахт в районе ведется с 1934 года. Первые угольные шахты в регионе были открыты в 1941 году геологом А. Идентифицирован Репманом. Тогда же в горах Бойсуна был открыт и введен в эксплуатацию угольный разрез Туда.

Шаргунский уголь высококалорийный, но пласты тонкие, средняя толщина составляет 2,5 метра, а местами достигает 12 метров. Поскольку угольные пласты расположены на высоких и крутых склонах, их добыча представляет собой сложный процесс. Мощность угольных пластов и условия разработки шахты Бойсун такие же сложные, как и на Шаргунской шахте.

Строительство Шаргунского угольного разреза началось в 1943 году. От железнодорожной станции Сариосие до Такчияна (ныне город Шаргун) построена 12-километровая железная дорога, введены в эксплуатацию 18-километровая подвесная канатная дорога для перевозки угля и 20-километровая автодорога. В 1958 году было создано горнодобывающее управление «Шаргункомир» и введен в эксплуатацию угольный разрез

мощностью 400 тысяч тонн в год. Объемы добычи угля в угольной промышленности региона увеличились. В 1965 году

На базе Шаргунского угольного разреза построен и введен в эксплуатацию брикетный завод. В 1980 году на Шаргунском угольном разрезе было добыто 220 тысяч тонн угля.

В 90-х годах прошлого столетия в угольной промышленности региона наблюдалось значительное снижение объемов добычи угля, основная причина которого объясняется моральным и физическим износом горнодобывающего оборудования. В годы независимости на базе Шаргунского угольного разреза было создано акционерное общество «Шаргун».

Мы можем наблюдать, что объем добычи угля в регионе за последние годы увеличился. Например, в 2012 году было добыто 19,8 тыс. тонн угля, в 2013 году – 20,1 тыс., в 2014 году – 107,2 тыс. тонн, в 2015 году – 127,0 тыс. тонн. произведено продукции на сумму 26 миллионов 781,0 миллиона сумов. Решение Президента Республики Узбекистан от 17 ноября 2014 года об инвестиционной программе на 2015 год и постановление Кабинета Министров Республики Узбекистан от 6 июня 2013 года о модернизации, техническом и технологическом обновлении угольной отрасли предприятий под управлением АО «Узбеккомир» в период 2013-2018 годов АО «Шаргункомир» в целях оснащения и его сбалансированного развития

реализуется инвестиционный проект модернизации. Общая стоимость проекта составляет 105,5 млн долларов США, реализуется он с сентября 2017 года китайской компанией China Railway Tunnel Group (GROUP). В ходе реализации проекта была очищена закрытая 1500-метровая часть старых 10 шахт шахты и пройден 2227-метровый участок тоннеля до дополнительного угольного пласта. Также шахта будет полностью оснащена современным угледобывающим оборудованием, импортированным из-за границы, а ее годовая мощность добычи угля будет увеличена до 900 тысяч тонн. С запуском нового рудника будет создано более 450-500 новых рабочих мест.

Осуществляется ряд инвестиционных работ по реконструкции Тодинского угольного разреза Байсунского района, который является вторым по важности участком угольной промышленности Сурхандарьинской области. Среди них выполняются проектные работы на сумму 50 миллионов долларов США. цель добычи угля в «Центральном» и «Восточном» районах этого района.

Таблица №1

Рост добычи угля в Сурхандарьинской области

№		2018	2019	2020	2021	2022	2023	Рост в 2023 году по сравнению с 2018 годом, в %
1	Добыча угля, тыс. тонн	181,0	241,9	263,7	275,1	282,3	352,2	1,9м
2	Рост добычи угля по сравнению с предыдущими годами в %	146,6	137,6	105,9	104,3	102,6	282,3	1,9м

Источник: информация сайта Surkhostat.uz.

Мы можем наблюдать, что объем добычи угля в регионе за последние годы увеличился. В 2023 году по сравнению с 2018 годом добыча угля выросла в 1,9 раза. Объем добычи угля увеличился на 171,2 тыс. тонн. Мы можем наблюдать, что темпы добычи угля увеличились по сравнению с предыдущими годами (Таблица 1, Рисунок 1).

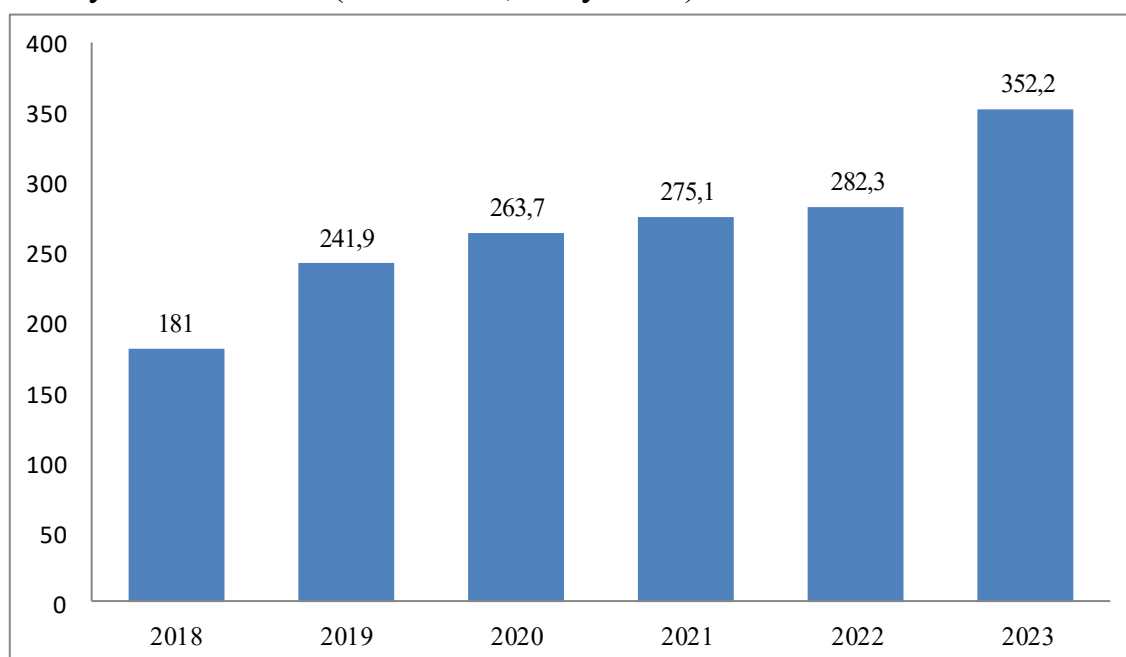


Рисунок 1. Объем добычи угля в Сурхандарьинской области прирост, тыс.т.

Если кратко, то в развитии угольной отрасли региона, прежде всего, добыча угля и его переработка глубоким технологическим путем, в частности организация производства в сети на кластерной основе, через «Горнодобывающая промышленность → переработка». промышленность → оказание услуг», связанное с угольной отраслью самого региона и

потребительскими секторами», создаст целую интегрированную систему. Это служит повышению экономического потенциала Сурхандарьинской области, очистке окружающей среды и улучшению благосостояния населения.

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*Абдурасулов Р.
студент 3 курса
Ташкентский государственный
экономический университет*

ПЕРСПЕКТИВЫ ДАЛЬНЕЙШЕГО РАЗВИТИЯ ИНВЕСТОРСКОЙ ДЕЯТЕЛЬНОСТИ В УЗБЕКИСТАНЕ

Аннотация. Цель и применение закона об инвестициях и инвесторах, права иностранных инвесторов и местных инвесторов, законодательства об инвестициях и инвестиционной деятельности, обязанности инвесторов предприятий с участием иностранных инвестиций.

Ключевые слова: Иностранные инвесторы, отечественные инвесторы, инвестиции, центр государственной безопасности, принцип единого окна.

*Abdurasulov R.
3rd year student
Tashkent State Economic University*

PROSPECTS FOR FURTHER DEVELOPMENT OF INVESTOR ACTIVITY IN UZBEKISTAN

Abstract. The rights of foreign investors and local investors, the legislation on investment and investment activities, the obligations of investors of enterprises with foreign investments, the purpose and application of the law on investment and investors.

Key words: Foreign investors, domestic investors, investment, state security center, single window principle.

Анализ литературы по теме.

Зарубежные экономисты по-разному интерпретировали свои взгляды на тему инвестиций и развития инвестиционной деятельности. Зарубежные экономисты в целом высказали следующие мнения по теме рассмотрения и развития колебаний глобальной экономической системы, инвестиционного климата, финансовых показателей и других факторов: Джозеф Стиглиц: Лауреат Нобелевской премии американский экономист Джозеф Стиглиц, исследование основных проблем инвестиционного развития и других факторов. настаивает на том, чтобы посвятить себя решению. Его взгляды касаются реформы финансовой системы, безопасности и развития методов производства. Нуриэль Рубини: Иностранный экономист Нуриэль Рубини подчеркивает важность безопасности и уверенности в инвестиционном развитии. Он рекомендует развивать восприимчивое поле финансовой

системы и реформировать глобальную инвестиционную систему. Дэни Родрик: Дэни Родрик подчеркивает роль экономической политики в инвестиционном развитии. По его словам, для привлечения инвестиций важно проводить правильную политику, развивать коммерческую среду и увеличивать сферу инвестирования.

Такие зарубежные экономисты подчеркивают применение финансовой, безопасности и доверия, экономической политики и мирового опыта в развитии инвестиций.

Введение.

В последние годы в целях облегчения и стимулирования осуществления предпринимательской деятельности в Узбекистане в результате пересмотра ряда стимулирующих мер, связанных с отраслью, созданы широкие возможности для субъектов предпринимательства и частных инвесторов в республике. Введение дополнительных требований, усложняющих процедуру возврата доходов (прибыли) иностранного инвестора, переведенных за пределы территории Республики Узбекистан, в свою страну или уменьшающих их размер, а также банкротство и неплатежеспособность предприятия с иностранными инвестициями или защита прав кредиторов, иностранного инвестора - физического в случае совершения лицом преступления или административного правонарушения, либо когда возникает иная необходимость приостановить возврат денежных средств в свою страну в соответствии с решением суда или арбитража, за исключением случаев приостановления возврата средств иностранного инвестора в свою страну компетентным государственным органом в условиях недискриминационного применения правовых документов.

Анализ и результаты.

Иностранные инвесторы – иностранные государства, административные или территориальные органы иностранных государств, международные организации, созданные в соответствии с соглашениями или иными соглашениями между странами или являющиеся субъектами международного публичного права, юридические лица, созданные и действующие в соответствии с законодательством иностранных государств, любые другие компании, организации или объединения, граждане иностранных государств и лица без гражданства, постоянно проживающие за пределами Республики Узбекистан; Местные инвесторы – граждане Республики Узбекистан, осуществляющие инвестиционную деятельность, иностранные граждане, имеющие статус резидентов Республики Узбекистан и предприниматели без гражданства, а также юридические лица Республики Узбекистан, в том числе физические лица; Ограничение использования государственными органами средств на счетах иностранных и местных инвестиционных предприятий или их принудительное изъятие может осуществляться только в соответствии с законодательством.

В целях стимулирования создания цепочки добавленной стоимости на предприятиях и обеспечения занятости населения путем реализации строительства внешних инженерно-коммуникационных систем проектов с привлечением прямых инвестиций иностранных и местных инвесторов в Республике: Инвестор: уплачивает налоги и сборы; выполнение договорных обязательств, которые он принял в связи с инвестицией; соблюдение требований законодательства, в том числе требований законодательства о конкуренции, противодействии коррупции, инвестициях и инвестиционной деятельности, труде, градостроительстве, охране окружающей среды и безопасности, санитарных нормах, а также технических регламентах; Государство гарантирует недискриминацию инвесторов на основании их гражданства, места жительства, места экономической деятельности, а также страны происхождения инвесторов или инвестиций.

Осуществление прав инвестора не должно нарушать охраняемые законом права и интересы других инвесторов. При этом государство как учредитель (акционер, участник) хозяйствующего субъекта имеет те же права и обязанности, что и другие учредители (акционеры, участники). Министерство реализует единую государственную инвестиционную политику, координирует привлечение иностранных, прежде всего прямых инвестиций, сотрудничество с международными финансовыми институтами (управлениями) и иностранными государственными финансовыми организациями, а также внешнеторговое и международное экономическое сотрудничество, внешнее нефинансовое сотрудничество. партизанская помощь республике — уполномоченный государственный орган, ответственный за формирование и координацию единой государственной политики в области привлечения финансовых средств (грантов, технической помощи, адресной непартийной помощи). Компетентный государственный орган в сфере государственного регулирования инвестиций и инвестиционной деятельности организует работу по принципу «одного окна» в целях оказания помощи инвесторам во взаимном сотрудничестве с другими государственными органами.

Уполномоченный государственный орган в сфере государственного регулирования инвестиций и инвестиционной деятельности и его территориальные подразделения обеспечивают предоставление государственных услуг в целях организации работы по принципу «единого окна», в том числе через соответствующие Центры государственных услуг. Организация дел по принципу «единого окна» также включает в себя следующее: прием и консультации по вопросам существующих государственных услуг; помощь в подготовке и оформлении документов, необходимых для получения государственных услуг; помощь в оформлении электронной цифровой подписи, электронного заявления и других документов; помощь в получении услуг в органах государственного управления и местного самоуправления; Не менее пятнадцати процентов

акций (долей, долей) или уставного фонда (уставного капитала) предприятий с участием иностранных инвестиций на территории Республики Узбекистан являются иностранными инвестициями. Государственная поддержка инвестиций и инвестиционной деятельности осуществляется в целях создания благоприятной инвестиционной среды, нового конкурентоспособного и инновационного, экспорта и обновления. Стимулирование инвестиций в организацию направленных и (или) импортозамещающих производств, расширение существующих производств с использованием современных технологий и внедрение современного опыта управления. Государственная поддержка инвестиций и инвестиционной деятельности осуществляется следующими способами:

- предоставление льгот и преференций;
- при совместном финансировании инвестиционного проекта;
- предоставление финансовых консультаций и информационной поддержки.

Остановимся на возможностях, предоставляемых инвесторам. Первое: в 2017 году введение свободной конвертации нашей национальной валюты – сума и снятие всех ограничений на репатриацию прибыли иностранными инвесторами.

Во-вторых, в целях обеспечения политики открытости в нашей стране создание безвизового въезда для граждан 90 зарубежных стран и возможности получения виз в упрощенном порядке для граждан еще 60 стран.

В-третьих, борьба с коррупцией стала наиболее приоритетным направлением государственной политики Узбекистана. Для реализации наших усилий в этом направлении было создано отдельное агентство. В-четвертых, высшим приоритетом было поставлено обеспечение и всесторонняя защита прав и свобод каждого человека, проживающего в нашей стране.

Дебаты.

Также в целях защиты прав и интересов инвесторов в стране принят новый Налоговый кодекс, Закон «Об инвестициях и инвестиционной деятельности» и Закон о медиации. Также для создания благоприятных условий для инвесторов создан Международный Ташкентский арбитражный центр, а также внедрены новые механизмы, такие как «инвестиционный кредит», «инвестиционная субсидия» и «инвестиционная виза». Эксперты также отметили, что изменения в законодательстве и созданные возможности положительно влияют на инвестиционную среду в стране. В 2017 году объем прямых иностранных инвестиций в страну составил 2,2 миллиарда долларов, а к концу 2022 года этот показатель увеличился в 1,5 раза и достиг 3,3 миллиарда долларов. В ноябре 2022 года состоялось первое пленарное заседание Совета иностранных инвесторов, а

в ближайшие 5 лет планировалось увеличить объем инвестиций до \$120 млрд и привлечь не менее \$70 млрд иностранных инвестиций.

Наша страна имеет большие возможности и потенциал для привлечения иностранных инвесторов. Двери открыты для всех иностранных инвесторов, которые хотят инвестировать в нашу страну подземные и наземные ресурсы. Самое отрадное, что в Узбекистане царит мир, а это первая возможность для инвесторов. Недавно в Ташкенте состоялось первое пленарное заседание Совета иностранных инвесторов при Президенте Республики Узбекистан, в котором приняли участие руководители ведущих мировых компаний и финансовых институтов. Выступая на конференции, глава нашего государства заявил, что в результате реализованных реформ по созданию благоприятной инвестиционной среды объем иностранных инвестиций, поступивших в нашу экономику, за последние 5 лет увеличился в 10 раз и составил почти 40 миллиардов долларов. Особо было подчеркнута, что цель – удвоить объем валового внутреннего продукта в течение следующих 10 лет по сравнению с текущими показателями. Инвесторы «Нового Узбекистана» выразили удовлетворение тем, что для них создаются все возможности чувствовать себя свободно, с большой уверенностью смотреть в будущее и стабильно работать. Самое главное, что при Президенте Узбекистана создан Совет иностранных инвесторов и в нем открыто решаются проблемы инвесторов, что вызывает большое доверие к иностранным инвесторам.

Заключение.

Подводя итог, можно сказать, что экономика не может развиваться без инвестиций. Если мы создадим среду и инфраструктуру для инвесторов, появятся рабочие места, вырастет производство, снизятся налоги. Необходимо обратить внимание на дальнейшее развитие деятельности предприятий. При поощрении инвестиций каждая Договаривающаяся Сторона разрешает и поощряет инвестиции инвесторов другой Договаривающейся Стороны в соответствии с правом, предоставленным законодательством своего государства. Каждая договаривающаяся сторона поддерживает различные формы взаимного инвестирования в рамках законодательства своего государства, а экономическое сотрудничество обеспечивается путем защиты инвестиций инвестора на своей территории государством другой договаривающейся стороны.

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*Абдурахманов А.А.
исполняющий обязанности доцента
Джизакский политехнический институт*

ПРЕДЕЛ ПОГРЕШНОСТИ ДОПУСТИМОГО ИЗМЕРИТЕЛЬНОГО ИНСТРУМЕНТА И ПРАВИЛА ВЫБОРА СРЕДСТВ ИЗМЕРЕНИЯ

Аннотация. В статье рассмотрен анализ предела погрешности, где, проведя расчет на точность измерения – уровня качества, показывающий насколько близок результаты измерения к действительному значению измеряемой величины.

Ключевые слова: предел измерения, погрешность, нормативы, качество, результат, надежность, сравнение, параметр, размеры, количество, точность.

*Abdurakhmanov A.A.
acting associate professor
Jizzakh Polytechnic Institute*

ERROR LIMIT OF PERMISSIBLE MEASURING INSTRUMENT AND RULES FOR SELECTION OF MEASUREMENT INSTRUMENTS

Abstract. The article considers the analysis of the margin of error, where, after calculating the accuracy of the measurement, the quality level, showing how close the measurement results are to the actual value of the measured value.

Keywords: measurement limit, error, standards, quality, result, reliability, comparison, parameter, dimensions, quantity, accuracy.

При анализе результатов измерений действительные количества физических величин сравниваются с результатами измерений [1,2]. Разница между результатом измерения (X) и фактическим количеством измеряемой величины (Q) называется Δ погрешностью измерения:

$$\Delta = X - Q \quad (1)$$

Точность измерения – уровень качества, показывающий, насколько близки результаты измерения к действительному значению измеряемой величины. Погрешности измерений классифицируются по их причинам и видам. Погрешности размеров подразделяются на следующее содержание в зависимости от причин их образования. Ошибка метода является результатом несовершенства метода измерения. Ошибка стиля также является структурной, и некоторые ее составляющие включают в себя совокупность ошибок, таких как: ошибка отображения прибора, ошибка, связанная с изменением температурного режима [3,4]. Ошибка подсчета возникает в результате недостаточно точного подсчета результатов

измерений и зависит от личных особенностей человека, производящего подсчет. Погрешность прибора – это погрешность используемого средства измерения. Погрешности средств измерений делятся на основные и дополнительные. В качестве основной погрешности принимают погрешности, характерные для средств измерений, применяемых в нормальных (нормативных) условиях. Дополнительная погрешность состоит из погрешности измерительных переключателей и погрешности, вызванной отклонениями от стандартных условий. Погрешности средств измерений нормируются путем установления предела допускаемой погрешности. Предельно допустимой погрешностью средства измерений является наибольшая погрешность, при которой средство измерения может считаться действительным и допущенным к использованию. При выборе средств измерений соблюдают следующие правила: Параметр точности средства измерений должен быть достаточно выше точности изготовления измеряемого объекта. Затраты на рабочую силу и стоимость измерений должны быть как можно ниже, чтобы обеспечить высокую производительность и экономичность. Недостаточная точность измерений приводит к тому, что часть годной продукции оказывается бракованной, при этом брак признается годной продукцией. Излишняя точность измерений обычно приводит к чрезмерному увеличению затрат на трудозатраты и контроль качества продукции [5]. При выборе средств измерений учитываются организационно-технические условия осуществления процесса контроля или измерений, особенности контролируемых деталей в системе, точность подготовки, а также ряд других факторов, влияющих на эффективность применения средств измерений. учитываются факторы приборов и метрологических показателей.

Основные факторы, на которые следует обратить внимание при выборе средств измерений: тип производства; конструктивные особенности и размеры контролируемых деталей; погрешность измерений, допускаемая стандартами.

Допустимая погрешность измерения $\Delta_{мет}$ служит важнейшим фактором при выборе средств измерений. Величина встреченного Δ зависит от скорости подготовки T детали, а в свою очередь связана с номинальным размером и качеством. (Фиксированная погрешность измерения $\Delta_{мет}$ должна быть меньше контролируемой величины T изделия.) погрешность (Δ_{lim}) и допустимая погрешность измерения ($\Delta_{мет}$) на основе взаимного сравнения. Часто допускаемую погрешность измерения ($\Delta_{мет}$) по отношению к припуску на подготовку (T) детали находят по следующей формуле:

$$\Delta_{мет} = (0,2 - 0,35)T \quad (2)$$

Таким образом, при выборе средства измерения (прибора) его предельная погрешность ($\pm\Delta_{lim}$) сравнивается с допустимой погрешностью измерения ($\Delta_{мет}$). В этом случае проверяется следующее соотношение:

$$\Delta_{\text{lim}} \leq \Delta_{\text{met}} \quad (3)$$

Из-за ошибок измерения отдельно измеренный размер обычно не считается фактическим размером этого размера. Необходимо провести несколько измерений, чтобы оценить точность измерения и определить количество измеряемой величины с определенной вероятностью. В этом случае измеряемая величина x является действительной [4]. Вместо его количества принимается его среднее арифметическое количество \bar{x} :

$$\bar{x} = \frac{1}{N} \sum_{i=1}^N x_i \quad (4)$$

где N – количество измерений;

x_i – результат отдельного измерения.

Таким образом, $x \approx \bar{x}$ мы имеем приближенное уравнение, чтобы оценить его точность, ε_{β} нам необходимо знать его вероятную погрешность, то есть $x - y_{\varepsilon_{\beta}} < x < x + y_{\varepsilon_{\beta}}$, используя распределение Стьюдента, можно оценить надежность через величину данной вероятной ошибки ε_{β} , или наоборот, β вероятность через заданную достоверность результата ошибки ε_{β} можно найти:

$$y_{\varepsilon_{\beta}} = \text{tg} \beta S / \sqrt{N} \quad (5)$$

здесь: $\text{tg} \beta$ - коэффициент Стьюдента β зависит от вероятности надежности и степени свободы;

S - значение среднего арифметического отклонения измеряемой величины x [5]:

$$S = \sqrt{\sum_{i=1}^N (x_i - \bar{x})^2 / (N-1)} \quad (6)$$

Степень свободы (K) — это количество наблюдений (N), уменьшенное на количество, равное количеству определяемых деталей (1) ($K=N-1$). При заданной степени свободы K β коэффициент Стьюдента находится по достоверности:

$$\text{tg} \beta = y_{\varepsilon_{\beta}} / \sigma_x = y_{\varepsilon_{\beta}} \sqrt{N} / \sigma, \quad (7)$$

где $\sigma_x = \sqrt{\sum_{i=1}^N (x_i - \bar{x})^2 / N}$ — среднее квадратическое отклонение для набора величин. Если значения известны, $y_{\varepsilon_{\beta}} = \text{tg} \beta \cdot \sigma_x$, можно $\text{tg} \beta$ и σ_x также определить доверительный интервал для величины x . Тогда результат измерения можно записать в следующем виде [6]:

$$x = \bar{x} \pm y_{\varepsilon_{\beta}}. \quad (8)$$

Проведя расчет составляющих дополнительной погрешности, обусловленной изменениями воздушного зазора. Анализ показывает, что составляющие погрешности и чувствительность элементарного преобразователя зависят от значения начального воздушного зазора $W_{\mu\delta 0}$ [7]

Мультипликативная относительная погрешность в этом случае определяется по формуле:

$$\gamma_{мз} = \frac{t}{2\tau_u} = 7,3 \cdot 10^{-5} \quad (9)$$

Для уменьшения погрешности преобразования необходимо обеспечение максимума параметра $R_{\mu k}$ [8,9].

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*Абдурахманов А.А.
исполняющий обязанности доцента
Джизакский политехнический институт*

ОЦЕНКА НЕОПРЕДЕЛЕННОСТИ ИЗМЕРЕНИЙ ПРИ ПРИНЯТИЯ РЕШЕНИИ О СООТВЕТСТВИИ ФИЗИКО-ХИМИЧЕСКИХ ВЕЛИЧИН

Аннотация. В статье рассмотрены вопросы об оценке неопределенности измерений при принятии решения о соответствии физико-химических величин, что определяет соответствие продукта, процесса и технологического процесса соответствующим стандартам и требованиям.

Ключевые слова: объективный критерий, вероятность ошибки, испытания продукции, предел допуска, поставщик, потребитель, качества.

*Abdurakhmanov A.A.
acting associate professor
Jizzakh Polytechnic Institute*

ASSESSMENT OF MEASUREMENT UNCERTAINTY WHEN MAKING DECISIONS ABOUT THE COMPLIANCE OF PHYSICAL AND CHEMICAL VALUES

Abstract. The article discusses the issues of assessing the uncertainty of measurements when deciding on the compliance of physico-chemical quantities, which determines the compliance of the product, process and technological process with the relevant standards and requirements.

Keywords: objective criterion, probability of error, product testing, tolerance limit, supplier, consumer, quality.

В настоящее время в Республике Казахстан реализуются следующие проекты: нормативные документы, правовые акты и согласованные улучшения, с целью сохранения доверия к спросу, безопасности и качеству. Сегодня это эффективное влияние на мирную экономику, мессенджерские мероприятия и

обнаружение объектов, влияющих на анализ, деловые решения и поступления, на репутацию и финансовые операции.

При аутентичной координации не только количественные результаты, но и разнообразные сценарии, такие как мощные искатели или приблизительные крайние конкретные слуги (варианты: У дона рисунок 1).

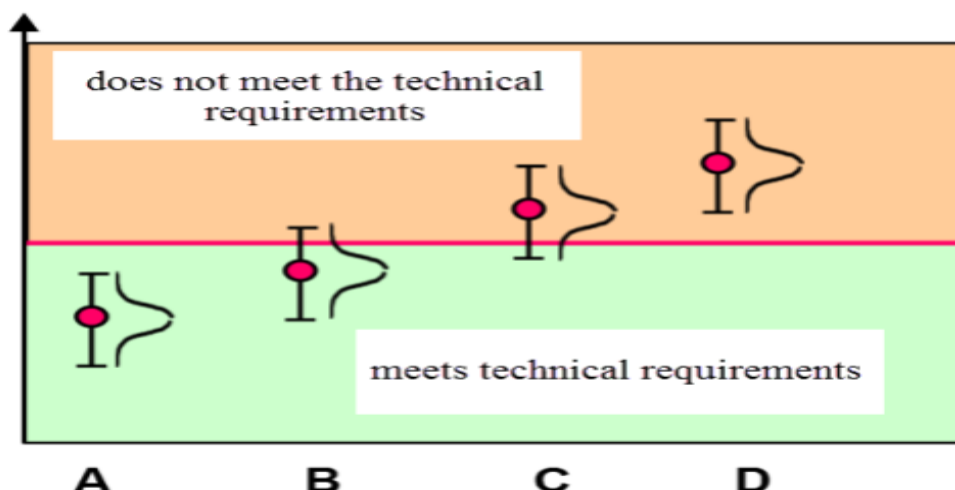


Рисунок 1. Результаты Испания и их непредставленность в отношении превосходства (Примечание: не соответствует техническим требованиям, соответствует техническим требованиям)

В этом случае варианты А и D приводят к общему разрешению, а не к возникновению и влиянию непредставительства. Однородный вариант V и S, с переносимым интервалом неопределенности. Такой анализ должен иметь объективный критерий (закономерность) принятия результатов, который имеет повышенную частоту интервала неопределенности, за которым следуют элементы допуска. Наиболее решающий в определении первичного закона вопрос о принятиях, следует доказать при уценке соответствия: соответствий или несвоевременное уточнение (техно-растительность) или ограничение. Риск поставщика (α) или риск- (β). Стандартная неопределенность измерения $u(y)$ и для определенного уровня Доверия расширенная неопределенность измерения. Единственный предел допуска (верхний или нижний) или пределы допуска, установленные в графике. Установите зону соответствия, зону несоответствия и полосу безопасности для предполагаемой вероятности ошибки типа I (риск поставщика α) или ошибки типа II (риск потребителя β).

Правило принятия решения. На рисунке 2 показаны основные международные стандарты правил принятия решений.

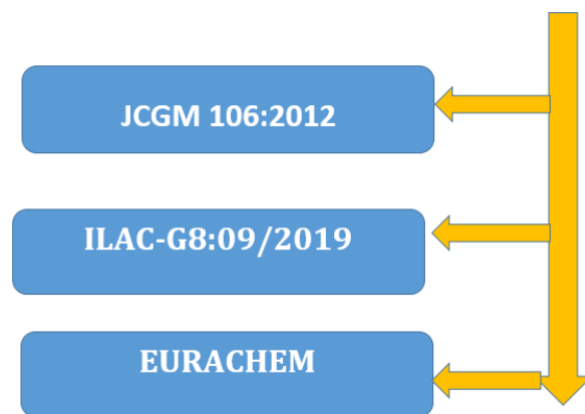


Рисунок 2. Международные стандарты правил принятия решений на основе риска.

При оценке соответствия (соответствует/несоответствие) решение принимается на основании наблюдаемых данных (измеренных величин). Полученные данные испытаний продукции фиксируются в журналах работы работника аккредитованной испытательной лаборатории с указанием идентификационных данных (дата, метод испытаний, фамилия, имя, отчество работника аккредитованной испытательной лаборатории и т.п.).

Аккредитованная испытательная лаборатория применяет следующие правила принятия решений при оценке соответствия с учетом конкретных 3 случаев. Главное правило Объект соответствует заданному требованию, если истинное значение его свойства Y находится в пределах поля допуска. Знание Y представлено функцией плотности вероятности (PDF) $f(x_i)$ таким образом, что утверждение о соответствии всегда является выводом, имеющим некоторую вероятность того, что оно истинно. Случай № 1 для одного нижнего предела поля допуска (например, не менее 50 мг/л). Вероятность соответствия определяется по следующим формулам (1). Если вероятность соответствия $p_c > 95\%$ принимается решение о соответствии. Если $p_c < 95\%$, принимается решение о несоответствии. Формула расчета p_c выглядит следующим образом:

$$p_c = \Phi\left(\frac{y - T_L}{u}\right). \quad (1)$$

Случай № 2 для одного верхнего предела поля допуска (например, не более 50 мг/л). Вероятность соответствия определяется по следующим формулам: При вероятности соответствия $p_c > 95\%$ принимается решение о соответствии. При $p_c < 95\%$ принимается решение о неисполнении. Формула расчета p_c выглядит следующим образом:

$$p_c = \Phi\left(\frac{T_U - y}{u}\right). \quad (2)$$

Случай № 3 для двустороннего поля допуска (например, от 50 мг/л до 80 мг/л). Вероятность соответствия определяется по следующим формулам: При вероятности соответствия $p_c > 95\%$ принимается решение о соответствии. При

$p_c < 95\%$ принимается решение о неисполнении. Формула расчета p_c выглядит

следующим образом:

$$p_c = \Phi\left(\frac{T_U - y}{u}\right) - \Phi\left(\frac{T_L - y}{u}\right). \quad (3)$$

При измерении неуказанных физических величин решение о соответствии образца продукции принимается заказчиком.

На рис. 3 представлены результаты экспериментальной работы с обработкой данных и расширенной неопределенностью измерений.

Выберите правильный размер подгруппы. В случае сомнений выберите размер подгруппы. Частичны подгруппы не отображаются (рисунок4).

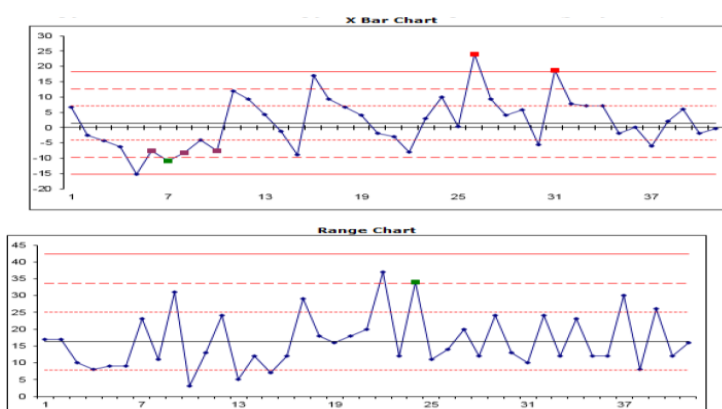


Рисунок 4. Оценка результатов измерения с использованием карты управления.

Закключение Оценка соответствия – это любая деятельность, предпринимаемая для того, чтобы прямо или косвенно определить, соответствует ли продукт, процесс, систему, лицо или тело соответствующие стандарты и соответствует определенным требованиям.

Поскольку результат измерения представлен в форме набора значений (измеренное значение значения и расширенная неопределенность формирует интервал покрытия), а требования устанавливаются в форме допусков или максимальных допустимых значений, существуют риски принятия неправильных решений по соблюдению. В области инженерии учет неопределенности измерений сводит к минимуму риск принятия решений.

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*Абдухаликова Д.А.
старший преподаватель
кафедры мировых языков и литературы
Государственный институт искусств и культуры Узбекистана*

**РАЗВИТИЕ ПОЗНАВАТЕЛЬНОГО ИНТЕРЕСА
ФРАЗЕОЛОГИЗМОВ НА ЗАНЯТИЯХ РУССКОГО ЯЗЫКА В
НАЦИОНАЛЬНЫХ ГРУППАХ ИНСТИТУТА ИСКУССТВ И
КУЛЬТУРЫ УЗБЕКИСТАНА**

Аннотация. В данной статье рассматриваются предложения и рекомендации по преподаванию русского языка и его фразеологии студентам института искусств и культуры.

Ключевые слова: русские фразеологизмы, национально-ориентированное преподавание, русский язык как иностранный, развитие навыков общения.

*Abdukhalikova D.A.
senior lecturer
Department of World Languages and Literatures
State Institute of Arts and Culture of Uzbekistan*

**DEVELOPMENT OF COGNITIVE INTEREST IN PHRASEOLOGISTS
IN RUSSIAN LANGUAGE CLASSES IN NATIONAL GROUPS OF THE
INSTITUTE OF ARTS AND CULTURE OF UZBEKISTAN**

Abstract. This article discusses proposals and recommendations for teaching the Russian language and its phraseology to students at the Institute of Arts and Culture.

Key words: Russian phraseological units, nationally oriented teaching, Russian as a foreign language, development of communication skills.

Настоящее время в практике обучения русскому языку иностранцев существует довольно сложная в методическом аспекте проблема освоения русской фразеологии, несмотря на то, что в учебной литературе теме преподавания русской фразеологии в иностранной аудитории уделяется достаточно много внимания. Интерес к фразеологизмам русского языка объясняется тем, что в данных языковых единицах представлено огромное количество внеязыковых сведений, что и составляет их специфику. Актуальность данной темы обосновывается тем, что освоение русских фразеологизмов иностранными учащимися является не только важным познавательным и общеобразовательным этапом в изучении русского языка, но и становится одной из ступеней развития коммуникативно

деятельностного подхода в изучении лексики. Знание и понимание смысла устойчивых оборотов дает возможность верно воспринять прочитанный отрывок текста или услышанную фразу. Умение правильно и в нужном контексте использовать паремии приводит к росту общей языковой культуры, позволяет образно, свободно и красочно излагать мысли, улучшает технику перевода, углубляет страноведческие познания обучаемых [1, с. 70].

Процесс образования фразеологизмов формируется из взаимных лексических сочетаний слов, построение словосочетаний является носителем определенного смыслового компонента, не зависящего от текущих лексических значений составляющих его членов. Мы должны различать конструктивное значение подобных сложных слов и лексическое значение его составляющих. Также часто утверждается, что значения этих словосочетаний зависят от какого-то неязыкового фактора — употребления местными носителями в обычных ситуациях [2]. Слова образуются путем сложения их вместе, чтобы сформировать лексические единицы, фразы или словосочетания. Нужно помнить, что это связано с лексикологическими словами, словообразовательными морфемами и словосочетаниями. Словосочетания отличаются структурными и семантическими связями. Некоторые словосочетания, например, по крайней мере, точка зрения, посредством, иметь место и т. д. кажутся функционально и семантически неразделимыми. Обычно они описываются как клише, словесные эквиваленты или фразеологические сочетания и изучаются в разделе фразеологии лексикологии. Части других словосочетаний типа брать уроки, добры к людям, неделю назад обладают более широкой семантикой и структурной самостоятельностью. Этот тип фразы называется самостоятельной фразой и изучается в синтаксисе. Вскоре началось изучение английской фразеологии. Английские и американские лингвисты обычно заняты сбором различных слов, фраз и предложений, которые интересуют их с точки зрения происхождения, стиля, использования и других характеристик. Все эти единицы принято называть «идиомами», но нецелесообразно описывать эти фразеологизмы как отдельный класс языковых единиц или особый класс словосочетаний. Различия в терминах (устойчивых словосочетаниях, идиомах и словосочетаниях) отражают ключевые особенности в различении свободных словосочетаний и фразеологизмов.

Во фразеологизмах национальная самобытность языка получает наиболее яркое и непосредственное проявление, так как они соотнесены прямо с внеязыковой действительностью. Выявление собственно-национальных свойств семантики фразеологической единицы одного языка может осуществиться только в сопоставлении данной фразеологической единицей родного языка учащихся, и выделение общих черт двух языков способствует быстрому пониманию семантики национально-культурного

компонента. Цели сопоставительных представлений национальных идиоматик и фразеологизмов вполне очевидны: «знание пословиц и поговорок того или иного народа способствует не только лучшему знанию языка, но и лучшему пониманию образа мыслей и характера народа. Как говорят англичане, *As the people, as the proverb* (Каков народ, таковы и пословицы)» [3].

Основную трудность для учащихся представляют ограниченно изменяемые фразеологизмы: устойчивые сравнения, фразеологические сочетания и некоторые структурные типы непредикативных афоризмов (поговорки, крылатые слова). Они требуют от учащихся знания закономерностей своей изменяемости. Во фразеологизмах наблюдается вариативность лексем, словоформ, структурных схем, факультативность компонентов. В связи с включением фразеологизмов в речь возникают трудности, обусловленные: общими и особыми средствами межфразовой связи, ограничением и отсутствием сочетаемости по общим правилам, индивидуальными правилами сочетаемости, постановкой знаков препинания по особым правилам, невозможностью включения членов предложения между компонентами фразеологизма. Многие из указанных трудностей усиливаются под влиянием внутриязыковой и межъязыковой интерференции [4].

Овладение иностранным языком для исполнения им главной – коммуникативной – функции предполагает и формирование (приобретение) культурной компетенции. При обучении русскому языку китайских учащихся возникает много сложностей именно из-за того, что культуры России и Китая далеки друг от друга. Это необходимо учитывать и строить процесс обучения студентов из Китая русскому языку так, чтобы происходило поэтапное формирование личности студента, развитие его творческих возможностей, пробуждение интереса к культуре, традициям и мироощущению русского народа. Каждый язык располагает своим арсеналом языковых средств и приемов, обслуживающих речевую деятельность на данном языке. «Сопоставляя русский язык с крайне далекими от него по строю языками Востока, – писал А. А. Леонтьев, – мы постоянно сталкиваемся с фактами, указывающими не просто на различия в характере оформления высказывания, но и на известное расхождение в способе семантической и семантико-грамматической категоризации действительности» [5]. В этом высказывании ясно выражены сущность и задачи межъязыкового сопоставления в связи с задачами обучения русскому языку как иностранному, а именно сравнительно сопоставительного анализа русской фразеологии и фразеологии родного языка учащихся. Сопоставление фразеологизмов приобретает особый практический смысл в страноведческом аспекте, который способствует расширению фоновых знаний учащихся и формированию у них лингвострановедческой компетенции, а также позволяет предупредить специфические ошибки,

вызванные интерференцией, и устранить интерферирующее влияние родного языка и культуры учащихся.

Исследование фразеологизмов дает возможность показать своеобразие русского языка, повысить эрудированность обучаемых через усвоение ими исторических, культурных и бытовых реалий русских. Паремии являются вместилищем этнографической и страноведческой информации, тем самым помогая студентам иностранцам в изучении русского языка. Подобное обучение содействует развитию положительной мотивации при усвоении лексики русского языка и приобретению не только лингвистических, но и лингвокультурологических и страноведческих знаний. Знакомство с богатым внутренним миром русских фразеологизмов стимулирует речемыслительную деятельность студентов, повышает качество преподавания русского языка иностранцам, предоставляет возможность планировать учебный процесс на новый лад, неординарно и результативно

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*Абылова Г.Ж., доктор педагогических наук (DSc)
доцент
Нукусский филиал ТУИТ имени Ал-Хорезмий*

ОСОБЕННОСТИ СПЕЦИАЛИЗИРОВАННОЙ ПОДГОТОВКИ СТУДЕНТОВ НА ОСНОВЕ ДИДАКТИЧЕСКОЙ МОДЕЛИ В ПРОЕКЦИИ ЦИФРОВОГО ОБРАЗОВАНИЯ

Резюме. В данной статье рассматривается важность задачи профессионального образования являющейся выработкой умений сознательной и эффективной работы студентов с информацией и грамотного применения современных технологий в любом виде образовательной деятельности. Стремительное насыщение информацией, свойственное современному обществу, требует переосмысления и изменения процессов обучения с использованием всех возможных средств, обозначающих существующую на сегодняшний день степень развития информационных и цифровых технологий.

Ключевые слова: педагогика, модель, информация, цифровое образование

*Abylova G.Zh., doctor of pedagogical sciences (DSc)
associate professor
Nukus branch of TUIT named after Al-Khorezmi*

FEATURES OF SPECIALIZED STUDENT TRAINING BASED ON THE DIDACTIC MODEL IN THE PROJECTION OF DIGITAL EDUCATION

Summary. This article discusses the importance of the task of vocational education, which is the development of the skills of conscious and effective work of students with information and the competent use of modern technologies in any kind of educational activity. The rapid saturation of information, characteristic of modern society, requires rethinking and changing the learning processes using all possible means that indicate the degree of development of information and digital technologies that exists today.

Key words: pedagogy, model, information, digital education.

Обучение каждого специалиста, в том числе и учителя музыки, необходимо держать в поле зрения различные виды компетенции. С этой точки зрения посмотрим на компетенции, нужные учителю при выполнении своих педагогических обязанностей в сфере применения информационных и коммуникационных технологий в образовательном процессе. Проанализируем требования, предъявляемые государственным образовательным стандартом республики Узбекистан высшего

профессионального образования к образовательным нормам будущего специалиста степени бакалавр по направлению музыкальное образование.

На сегодняшний день существует определенная система моделей, которая активно используется исследователями для того, чтобы детализировать изучаемые свойства, отличительные стороны, специфику педагогических явлений. Самыми распространенными типами моделей являются: организационные модели – система для управления объектом, процессные модели – система взаимосвязи непрерывных действий, функциональные модели – система исследуемая взаимосвязь работы внешних и внутренних объектов, образовательные модели – система оценки обучающего процесса, математические модели – система представления информации о другой системе.

Процессная модель, которая отличается от других моделей обозначением очередности перехода изучаемого объекта из начального состояния в иное, часто используется для исследования проблем, связанных со становлением свойств личности [1].

Используя методологический и педагогический анализ сущности моделирования, а также руководствуясь требованиями государственного образовательного стандарта, мы рассмотрим структуру модели подготовки будущего учителя музыки в среде цифрового образования.

Первый блок процессной модели - целевой. Следует правильно поставить цель при данном исследовании, т.к. именно она выступает доминантой направленности процесса становления специализированной компетентности студентов, и имеет важное значение при определении процесса структурирования модели, эффективность её практического применения и решении вопросов модели.

Второй блок – методологический. В блок модели необходимо включение описания научно-исследовательских подходов и принципов, методов изучения, способствующих совершенствованию профессиональных качеств студентов в условиях цифрового образования.

Слову "подход" в педагогике принято давать такое определение, как главная теоретическая и методологическая стратегия исследования [1]. Ведущие специалисты считают, что профессиональная подготовленность учителя музыки в полной мере может проявляться только в его повседневной деятельности. В связи с этим, было решено использовать такой подход в качестве основного.

В качестве дополнительного подхода принято использование ценностного подхода, как необходимого средства описания понятия профессиональной компетенции преподавателей музыки в их будущей деятельности, с учетом важности обозначения их отличительных сторон и информационной базы современного технологического окружения.

Рассматривая профессиональное образование с позиции деятельности, можно отметить, что она функционально является

структурной составляющей совершенствования профессиональных свойств личности, в проекции будущего специалиста. Главные проблемы образовательного процесса, которые необходимы для профессионального становления студента, как правило, не могут решаться вне зависимости от его деятельности. Студент, получая навыки, знания и умения предстоящей профессиональной деятельности, переживает разные испытания. Содержание и направленность видов деятельности определяется особенностями выбранной профессии. Узкопрофильная специализированная деятельность студента музыкального направления базируется на взаимоотношениях его творчества с информационной средой, в которой оно находится, и не может быть претворена без определения своей ценностной личности в этом измерении.

Данные ценности, составляющие окружение студента, имеют важное значения в создании цели деятельности и мотива ее определяющего, поскольку всегда имеется риск затруднения в реализации полученных знаний в случае отсутствия таких ценностей [2].

То как студент относится к своим поступкам, определяющим его образ жизни, выявляет его подход к своей будущей профессии в условиях информационной трансформации, ставящей во главу угла, именно, знания в цифровой области. Это обусловлено тем, что в данной проекции происходит поочередный процесс преобразования информации в знания, а затем уже они становятся инструментом практического применения в своей работе.

За последнее десятилетие стремительно развивается аксиологический, то есть ценностный подход, который приобретает положение междисциплинарного подхода. Данный подход используется при изучении явлений и фактов социально-нравственного характера. Актуальность ценностного подхода обуславливается преобразованиями социокультурного пространства и социальной нестабильности общества, когда особое значение приобретает нахождение новых ценностей, отражающих ситуации в обществе объективно. Современная жизнь требует раскрытия, выявления, упорядочения, систематизации таких ценностей, которые может присвоить информационное общество в нынешнее время [3]. Итак, ценностный подход на сегодняшний день считается механизмом решения различных вопросов педагогики и психологии, культурологи и социологии и т.д.

Аксиологический подход, связывающий теорию музыкальные знания с цифровой компьютерной практикой, является одной из составляющих деятельностного подхода. Это тем более важно на фоне невозможности оценить информационные знания без учета его деятельности, где они и получают свое конкретное выражение.

Информативность, ценностность, творческая активность выступают ведущими принципами, которые обеспечивают результативность процесса

совершенствования профессиональной компетенции будущих преподавателей музыки, учитывая условия цифрового образования.

Методы исследования представляются в методологическом блоке разработанной модели. В исследовании использованы такие методы, как: информационный просмотр, анализ и сортировка научной литературы по теме исследования, обработка нормативно – правовых документов, применение моделирования, наблюдение за деятельностью педагогов и студентов, тестирование и анкетирование, опрос, изучение результатов обучения студентов музыкального направления, констатирующий эксперимент, математическая статистическая обработка данных полученных в процессе экспериментов.

Процессный блок предложенной модели содержит в себе организационно – педагогические условия, этапы, технологическую основу, придающие динамичность и результативность изучаемому процессу. Соответственно сам процесс совершенствования профессиональной подготовки студентов становится эффективным, в случае внедрения в него определенных организационно – педагогических условий.

Говоря об условии как философском понятии, мы принимаем его как «то, от чего зависит нечто другое». Трансформируя это выражение в более понятное и конкретное, условия можно обозначить как внешнюю канву события, определяющую возможность его появления, а с позиции временной характеризующую особенности внутренней сути предмета. Исходя из этого можно прийти к выводу о побудительной стороне условия, обуславливающей причины отдельных явлений, ситуаций и поступков. В этом случае, педагогическим условием считается компоновка педагогических обстоятельств, ставящих единой целью эффективное выполнение студентами задач и выделенное как результат их экспериментальных работ [4].

Выделим организационно-педагогические условия формирования профессиональной компетенции учителей музыки с учетом тенденций развития образования в современном мире.

Выделение данного педагогического условия напрямую основано на специфике современного молодого поколения, сформировавшегося в условиях широкого и регулярного применения компьютерных технологий и обозначенного как «цифровые аборигены» [3].

Свойствами среды, совмещающей в себе информационную и образовательную составляющую являются особенности распределения, создающиеся посредством свободно доступного мирового контента, процесс передачи знаний в котором не ограничивается однонаправленностью вектора движения преподавателя в сторону студента, но дополняется другими векторами: «студент — студент», «студент — преподаватель». Цифровые технологии значительно ускоряют информационный обмен и делают более доступным взаимодействие

участников в процессе их обучения. Результатом становится гибкость и доступность образования.

Использовании в образовательном процессе практических заданий, созданных на основе компьютерных технологий и ориентированных на переключение от репродуктивного типа образовательной деятельности к творческому подходу, является следующим вторым условием в педагогическом развитии профессиональной компетенции студентов в реалиях цифрового образования.

Полное понимание студентами всей значимости современных технологий в информационном поле появится при практическом применении специальных, ориентированных на будущую профессию, учитывающих ценностную составляющую, заданий в различных векторах, способствующих появлению мотивации при изучении предметов, связанных с музыкой, деятельности, включая навыки вариативного мышления и поиска неординарных методов решения профессиональных целей и задач. В массив предполагаемых задач включаются разные типы работы с информацией, в частности поиск необходимых сведений, их последующий анализ и дальнейшая обработка.

Установочный, адаптационный и проектировочные этапы развития подготовки компетенции студентов отражены в процессном блоке предлагаемой модели.

Установочный этап ориентирован на подготовку студента к работе с современными цифровыми технологиями в целях сбалансированной деятельности во время учебы. Адаптационный этап определен подключением к ранее не известным видам деятельности, работы со свежими программными информационными средствами, по итогам которых студент создает свой собственный потенциал, дающий возможность встречного движения по направлению к предлагаемым событиям и требованиям. Этап, представляющий проектную составляющую процесса подразумевает активную деятельность, направленную на преобразование своего опыта с целью саморазвития и проектирования дальнейшей деятельности в изменяющейся информационной среде.

Для описания профессиональной компетенции будущих учителей-музыкантов применяется блок, состоящий из следующих компонентов: критерии, показатели и уровни компетенции. Уровни формирования компетенции определяются такими характеристиками, как адаптивность, продуктивность, открытость и креативность.

Для определения уровня сформированности профессиональной компетенции будущих учителей музыки, необходимо выделить критерии получения объективной оценки.

В качестве критериев выступают компоненты профессиональной компетентности: познавательный, действенный и мотивационный.

Контрольный блок ставит своей целью создание критериев контроля и применение их в функции оценки для качества обучения.

Этот блок создается в границах общей методической системы обучения педагогических вузов, которая объединяет структурную систему контроля качества подготовки учителей музыки, подразумевающую на контроль:

- результата преподавания;
- качества обучения;
- научной и педагогической деятельности и его результаты.

Результаты обучения, проверка и оценка эффективности и качества организации учебного процесса используются на нескольких уровнях, представляющих преподавателя, кафедру, деканат и ректорат.

Результативный блок предлагаемой модели предусматривает функцию обратной связи и дает возможность анализа и корректировки процесса формирования профессиональной компетенции студентов.

Таким образом, в спроектированной процессной модели представлена последовательность и взаимозависимость всех рассмотренных блоков.

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*Ўсимликлар карантини ва ҳимояси илмий -тадқиқот институти
Андижон вилояти минтақавий филиали “Қишлоқ хўжалик
экинларининг зарарли организмлари ва дала таҳлиллари”
лабораторияси кичик илмий ходими*

БЕХИ МЕВАСИННИНГ ФОЙДАЛИ ХУСУСИЯТЛАРИ ВА КАСАЛЛИКЛАРИ

Abstract. In the gardens of our country, due to the disease moniliosis, the quality and quantity of fruits drops sharply. One of the main factors is the correct diagnosis of moniliosis disease, the ability to distinguish it from other diseases, the correct organization of the fight against it and the correct use of fungicides against the disease.

Key words: gardens, disease, fruits, basic, diagnosis, moniliosis, other, control, correct, fungicides, against.

Akbarov R.J.

*Junior researcher of the laboratory "Harmful organisms of agricultural crops
and field analysis"
Andijan region regional branch
Research Institute of Plant Quarantine and Protection*

THE USEFUL PROPERTIES AND DISEASES OF PINE FRUIT

Аннотация. Мамлакатимиз боғларида монилиоз касаллиги туфайли меваларнинг сифати ва миқдори кескин пасайиб бормоқда. Монилиоз касаллигини тўғри таъхислаш, уни бошиқа касалликлардан ажрата олиш, унга қарши курашни тўғри таъкил этиш ва касалликка қарши фунгицидлардан тўғри фойдаланиш асосий омиллардан биридир.

Калит сўзлар: боғлар, касалликлар, мевалар, асосий, диагностика, монилиоз, назорат, тўғри, фунгицидлар, қарши.

БЕХИ —раънодошлар оиласига мансуб мевали дарахт. Ўзбекистондаги бехизорларнинг 80% Фарғона водийсида. Барги оддий, яшил, чети бутун. Гуллари якка холда, ок ёки оч пушти, апрель ойида гуллайди. Кўчати ўтказилгач, 3—4 йилда ҳосилга киради, 30—40 йил яшайди. Катта ёшдаги дарахтлари ўртача 60—70 кг ҳосил беради. Меваси сентябрь—октябрь ойларида териб олинади; вазни, навига караб 150—500 г. Беҳи мевалари лимон рангда ёки тук сарик, тук билан копланган; етилганда туки тўкилиб кетади, хушбўй. Янги узилган меваси кам истеъмол қилинади.

Беҳи энтомофил (ҳашаротлар билан чангланадиган) ўсимлик. Беҳи таркибида 74,7—83,5% сув, 8,5— 15,2% қанд, 0,2—1,5% кислота бор, шунингдек ошловчи моддалар ва тош хужайралар бўлади. Меваси дағал бўлиб, узоқ сақлангандан кейин тош хужайралар юмшаб қолади.

Беҳидан мураббо, компот, мармелад, цукат, киём, жем тайёрланади, овқатга (кўпинча паловга босиб) ишлатилади.



1-расм. Беҳининг монилиоиз касалликлари

Мамлакатимиз боғларида монилиоиз касаллиги туфайли қосилнинг сифати ва миқдори кескин даражада тушиб кетиш ҳолатлари кузатилмоқда. Монилиоиз касаллигига тўғри ташхис қўйиш, уни бошқа касалликлардан фарқлай олиш, унга қарши кураш ишларини тўғри ташкил этиш, касалликка қарши фунги-цидларни меъёрида ва ўз муддатида қўллашнинг асосий омилларидан бири ҳисобланади. Маълумки, монилиоиз касаллиги уруғли мева дарахтларининг гуллари, барглари, мевалари ва новдаларида кузатилади. Олма ва нок, беҳи дарахтларидан иборат интенсив боғларда монилиоиз куйиш ва монилиоиз чириш кўриниши кузатилади. Олма ва нокда монилиоиз куйиш касаллигини *Monilia cinerea* Bonard.f. *mali* замбуруғлар келтириб чиқаради. Касалликнинг бу кўринишида энг аввал гулларининг уруғчиси, кейин чангчиси, гултожибарглари, сўнгра барглари ва ҳосил бўлган ёш мевалари қуриб куйганга ўхшаш кўринишга эга бўлиб, новдада осилиб қолади. Зарарланган аъзоларида жигарранг доғлар ҳосил бўлади, кейинчалик мева тугунчалари юмшаб, замбуруғ спораларидан иборат 1-2 мм диаметрли ёстиқчалар билан қопланади. Касалликнинг бу кўриниши тез кечганлиги сабабли гуллар совуқ урганга ўхшаб қолади. Зарарланган новдаларда ярачалар ҳосил бўлиб, учки қисмидан қурий бошлайди. Касалликнинг тез кечишига илиқ ва нам ҳавода замбуруғ кўплаб конидийлар ҳосил қилгани ҳамда намлик сабаб бўлади, ҳавога тарқалган конидийларни гулларга ёпишиб, уни зарарлаши учун қулай имконият яратади. Касалликнинг бирламчи инфекция манбаи зарарланган новдалар, барг ва гулларнинг қолдиқлари бўлса, иккиламчи инфекция манбаи эса ўсув даврида зарарланган ўсимлик аъзолари ҳисобланади. Бу замбуруғ микроскоп остида кузатилганда унинг конидийлар шакли лимонсимон кўринишда бўлиб, конидийларининг учки қисмида сўрғичсимон

Ўсимталари бор ва бу конидийлар бир-бирига занжирсимон тарзда бирикканлиги кўрилади. Замбуруғ конидийларнинг ўлчамлари ўлчанганда 5-9x14-19 ни, сўрғичи билан биргаликда 16-17x7-8 ўлчамга эга эканлиги кузатилди. Беҳида монилиоз куйиш касаллигини *M.cydoniae* Schell, замбуруғлари кўзғатади. Касаллик туфайли фақат гуллари эмас, балки новдалар учигаги барглар, мева ва новдалар зарарланади. Натижада новдаларда ярачалар ҳосил бўлади. Зарарланган барг ва мевалар ривожланмайди, куйганга ўхшаш кўнғир тусга кириб, дарахтда ўсув даврининг охиригача сақланиб қолади. Новдалар эса учки қисмидан қуриб қолади. Беҳининг зарарланган баргларида сарғиш-жигарранг, кейинчалик тўқжигар рангга кирувчи доғлар юзага келади ва бу доғлар кейинчалик барг пластинкасини тўлиқ қоплаб олади. Зарарланган аъзолари ва баргларида кулранг ғуборлар ҳосил бўлади. Барглардаги бундай ғуборлар кўпроқ асосий томир бўйлаб юзага келади. Олма, нок ва беҳида монилиоз чириш касаллигини кўзғатувчиси *Monilia fructigena* Pers. замбуруғи бўлиб, уруғли меваларда монилиоз чириш касаллигининг биринчи белгилари мевалар ўсишдан тўхтаб шира тортиш давридан бошлаб кўзга ташланади. Уруғли меваларнинг навига қараб бу муддат август ойдан сентябрь ойининг охиригача давом этади. Зарарланган мева сиртида оч кўнғир тусдаги майда доғлар ҳосил бўлади. Доғлар ҳосил бўлган қисмида мева тўқимаси юмшайди. Бу доғлар катталашиб 5-6 кун ичида бир неча сантиметргача етади. 8-10 кун давомида эса бу доғлар мева сиртининг катта қисмини ва ҳатто бутунлай қоплаб олади. Бундай мевалар ўз кўринишини йўқотиб, бўтқасимон массага айланиб қолади. Доғлар катталашини даврида меваларнинг сиртида касаллик кўзғатувчи замбуруғнинг кетма-кет концентрик айланалар ҳосил қилган конидийларидан иборат кулранг-кўнғир тусдаги ёстикчалар юзага келади. Бундай мевалар тўкилиб кетади ёки дарахтларда қолиб, мумланган кўринишга эга бўлади. Кейинчалик олма ва беҳи меваси қораяди, нок меваси оч кўнғир рангга қовжираган кўринишда осилиб қолади. Монилиоз чириш фақат ўсув даврида эмас, балки меваларни омборхонада сақдаш даврида ҳам учрайди ва тез ривожланиб катта зарар келтиради. Касаллик кўзғатувчи замбуруғ зарарланган мева сиртида ҳосил қилган ёстикчаларидаги конидийлар бир-бирига ёпишиб занжирча кўринишига эга бўлади. Занжирча ҳосил қилган конидийлар етилганда узилади ва атрофга тарқалади. Замбуруғнинг мицелийлари бошланғич даврда меванинг зарарланган қисмида бир текис тарқалган бўлса, кейин чалик зарарланган тўқиманинг четки қисмида тўпланиши туфайли бу жойдаги тўқима қаттиқлашиб қорамтир тусга кириб қолади. Олма, нок ва беҳи меваларининг монилиоз чириш касаллиги билан зарарланган меваларидан замбуруғининг соф культуралари ажратиб олиниб, ташқи кўриниши микроскоп остида кўрилганда бу замбуруғнинг конидийлари тухумсимон ёки эллипссимон шахлда бўлиб, рангсиз, улар оддий ёки шохланган занжирларга бирлашганлиги кўрилди. Уруғли мева

боғларида монилиоз касаллиги икки хил: монилиоз куйиш ва монилиоз чириш кўринишида зарар келтириб, монилиоз куйиш касаллигини олма ва нокда *Monilia cinerea* Bonard.f. mali, беҳида *M.cydoniae* Schell., монилиоз чириш касаллигини *Monilia fructigena* Pers. Замбуруғлари келтириб чиқаради.

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Акромов Б.О.
преподаватель
Международный институт пищевых технологий и инженерии
Республика Узбекистан, г.Фергана

ВАЖНОСТЬ ИСПОЛЬЗОВАНИЯ ТЕРМОЭЛЕКТРИЧЕСКИХ ПРЕОБРАЗОВАТЕЛЕЙ ЭНЕРГИИ И УСТРОЙСТВ

Аннотация. Термоэлектрические преобразователи энергии (ТЭП) и устройства представляют собой значимую технологическую инновацию с огромным потенциалом в различных областях промышленности и научных исследований. Этот обзор исследует важность использования ТЭП и устройств, анализируя их роль в повышении энергетической эффективности, сокращении выбросов парниковых газов, развитии возобновляемых источников энергии, а также в увеличении автономии мобильных устройств. Обсуждаются математические модели, описывающие принцип работы ТЭП, и их важность в контексте современных технологических вызовов, таких как экологическая устойчивость и энергетическая эффективность. В заключении подчеркивается необходимость дальнейших исследований и инноваций в этой области для достижения более широкого внедрения и оптимизации термоэлектрических технологий во всем мире.

Ключевые слова: термоэлектрические преобразователи, технология, энергетическая эффективность, полупроводник, термоэлектрических устройств, энергетическую эффективность.

Akramov B.O.
lecturer
International Institute of Food Technologies and Engineering
Republic of Uzbekistan, Fergana

IMPORTANCE OF USING THERMOELECTRIC ENERGY CONVERTERS AND DEVICES

Abstract. Thermoelectric energy converters (TECs) and devices represent a significant technological innovation with enormous potential in various fields of industry and research. This review explores the importance of TECs and devices, analyzing their role in improving energy efficiency, reducing greenhouse gas emissions, developing renewable energy sources, and increasing the autonomy of mobile devices. Mathematical models describing the operating principle of TECs and their importance in the context of modern technological challenges such as environmental sustainability and energy efficiency are discussed. The conclusion highlights the need for further research and innovation

in this area to achieve wider adoption and optimization of thermoelectric technologies worldwide.

Keywords: thermoelectric converters, technology, energy efficiency, semiconductor, thermoelectric devices, energy efficiency.

Сегодня производство термоэлектрического оборудования является одной из наиболее быстро развивающихся отраслей во всех развитых странах. Теоретические аспекты применения термоэлектрических эффектов, созданные академиком А. Ф. Иоффе и его коллегами, позволили широко использовать полупроводниковые термоэлектрические преобразователи энергии в различных отраслях промышленности. Средний рост мирового производства за последние годы. Термоэлектрические устройства (ТЭД) различного назначения составляют около 14-15%.

Столь высокие и стабильные темпы роста особенно важны для таких высоких технологий, как информационные технологии. В последние годы эта отрасль производства достигла значительного развития, так как позволила создать малогабаритные устройства для регулирования температурных условий работы различного оборудования, получения локальных значений теплоты и активации процессов теплопередачи в также были достигнуты сложные системы и производство электроэнергии с использованием различных альтернативных методов.

В настоящее время производство ТЭМ осуществляется на стандартной основе. Во многих публикациях имеется достаточно информации о параметрах и характеристиках таких модулей. Данные высокого уровня описывают ранние тенденции в разработке термоэлектрических устройств, и основной упор при производстве ТЭМ делается на относительно сильные охлаждающие ТЭМ. Такая мощность охлаждения ТЭМ очень велика и находится в пределах 75-100 Вт. ТЭМ рассчитаны на большие плотности питающего тока, размеры их спаев находятся в пределах 4x4-9x9 мм², высота ветвей ТЭ 3-5 мм. Основными причинами, определявшими большие размеры термопар и высокие значения токов питания, были технологические трудности создания малогабаритной термопары. В настоящее время ведущими предприятиями освоено серийное производство сильно- и слаботочных ТЭД, выполненных в виде полноценных конструктивных элементов, помещенных в защитные оправки и снабженных собственными токопроводами. Основные виды современных, промышленно выпускаемых ТЭМ и их характеристики представлены на сайтах компаний-производителей. Анализ тенденций развития российских и зарубежных технологий позволяет сделать вывод, что сфера применения ТЭМ расширяется и это хорошо. Также возрастает потребность в миниатюрных охлаждающих устройствах с техническими характеристиками. Основными потребителями таких ТЭП являются электроника, микроэлектроника, медицинская и измерительная техника, в

частности устройства, включающие в себя датчики и преобразователи инфракрасного излучения, используемые в термометрии, системах ночного видения и т. д. В последние годы еще одной крупной категорией потребителей термоэлектрических устройств являются элементы когерентной технологии, изготавливаемые в полупроводниках, особенно в инжекционных лазерах. В последнее время много работ по этой проблеме опубликовано в России, Китае, США, Японии и Европейском Союзе. Ключевым вопросом считается возможность использования эффекта Пельтье в полупроводниковой структуре прямого лазера с использованием интегрированных технологий.

Фотоприемникам, фотоумножителям, параметрическим усилителям, генераторам видеосигналов, интегральным схемам, усилителям на полевых и биполярных транзисторах, модуляторах света, многим из которых связано использование термоэлектрических преобразователей энергии для обеспечения температурного режима фотоэлементов, посвящены научные лекции. Светодиоды, преобразователи изображения, элементы компьютерной техники, электронные системы управления ракетами, радиоаппаратура, наземные и космические исследования - в результате практических экспериментов во всех этих областях существенно изменились параметры и характеристики тепловых электростанций.

Следует отметить термоэлектрические преобразователи энергии (ТЭП) и устройства играют важную роль в современном мире по нескольким причинам.

1. Энергетическая эффективность: ТЭП могут преобразовывать тепловую энергию, которая обычно теряется как отходы в процессе работы многих систем, в электрическую энергию. Это позволяет увеличить энергетическую эффективность и сократить потери энергии.

2. Возобновляемая энергия: Одним из примеров применения ТЭП является использование тепловых источников, таких как солнечная энергия или отходы тепла от промышленных процессов, для генерации электричества. Это содействует развитию возобновляемой энергии и снижению зависимости от источников энергии, истощающихся с течением времени.

3. Мобильные устройства: ТЭП также используются в мобильных устройствах, таких как некоторые типы датчиков, где они могут преобразовывать тепловую энергию от человеческого тела или окружающей среды в электричество. Это может помочь увеличить автономность таких устройств и снизить зависимость от батарей или других источников питания.

4. Промышленные приложения: ТЭП находят широкое применение в промышленности, например, для охлаждения или нагрева объектов, контроля температуры и поддержания устойчивости процессов.

5. Экологическая эффективность: Использование ТЭП может способствовать сокращению выбросов парниковых газов и других загрязнений, так как это помогает оптимизировать использование энергии и снизить необходимость в использовании источников энергии, работающих на основе ископаемого топлива. Использование ТЭП и устройств на их основе продолжает развиваться и расширяться в различных областях, что способствует улучшению энергетической эффективности и уменьшению негативного воздействия на окружающую среду.

Ниже мы можем видеть некоторые математические выражения с использованием термоэлектрических преобразователей и устройств:

Вот несколько примеров математических выражений, связанных с применением термоэлектрических преобразователей (ТЭП) и устройств:

1. Коэффициент термоэлектрической эффективности (η):

$$\eta = \frac{T_h - T_c}{T_h}$$

Где (η) - коэффициент эффективности, T_h - температура нагрева, T_c - температура охлаждения. Этот коэффициент показывает эффективность преобразования тепловой энергии в электрическую.

2. Напряжение термоэлектрической ЭДС (Электродвижущая сила):

$$E = S \cdot (T_h - T_c)$$

Где E - напряжение ЭДС, S - коэффициент термоэлектрической силы.

3. КПД термоэлектрического преобразователя:

$$\eta_{\text{ТЭП}} = \frac{\Delta T}{\Delta T + \frac{T_h + T_c}{2}}$$

Где $\eta_{\text{ТЭП}}$ - КПД термоэлектрического преобразователя;

$\Delta T = T_h - T_c$ - разность температур между нагревом и охлаждением.

4. Мощность, вырабатываемая ТЭП:

$$P = \frac{S^2 \cdot (T_h - T_c)^2}{R}$$

Где P - мощность, T_h - температура нагрева, T_c - температура охлаждения,

S -коэффициент термоэлектрической силы, R - сопротивление нагрузки. Эти выражения позволяют оценить эффективность и потенциал ТЭП и устройств на их основе в конкретных условиях.

Математическое выражение для описания работы полупроводников с использованием термоэлектрических преобразователей энергии часто связано с явлением термоэлектрического эффекта. Одним из основных математических выражений, описывающих этот эффект, является закон Сеебека.

Закон Сеебека описывает эффект термоэлектрического напряжения в полупроводниках при наличии температурного градиента. Математически он может быть выражен следующим образом:

$$E = S \cdot \Delta T$$

Где: E - термоэлектрическое напряжение (ЭДС), создаваемое в полупроводнике;

S - коэффициент Seebeck (также известный как термоэлектрическая сила), который является свойством материала и обозначает количество термоэлектрического напряжения, создаваемого при единичном температурном градиенте;

ΔT - разность температур между двумя концами полупроводника.

Это выражение демонстрирует, как термоэлектрический эффект может использоваться для создания напряжения в полупроводниках при наличии разности в температуре между их концами.

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*Аксёнова Д.А.
студент 2 курса магистратуры
Поволжский государственный
университет телекоммуникаций и информатики
Россия, г. Самара*

ИССЛЕДОВАНИЕ АСПЕКТОВ ТЕСТИРОВАНИЯ ПРОГРАММНОГО КОДА С ИСПОЛЬЗОВАНИЕМ SMT- РЕШАТЕЛЕЙ

Аннотация. В статье рассматриваются различные аспекты тестирования программного кода с использованием SMT-решателей (Satisfiability Modulo Theories). Использование SMT-решателей для поиска ошибок в программном коде и доказательства его корректности по отношению к заданным спецификациям и свойствам. Эта публикация будет полезна разработчикам программного обеспечения, которые заинтересованы в повышении надежности и качества своего кода, а также специалистам по тестированию, которые ищут методы оптимизации процесса тестирования.

Ключевые слова: SMT-решатель, тестирование кода, методы тестирования (модульное, интеграционное, системное, приемочное), статический анализ кода, дилемма статического анализа.

*Aksenova D.A.
second year graduate student
Povolzhskiy State University of Telecommunications and Informatics
Russia, Samara*

STUDYING ASPECTS OF PROGRAM CODE TESTING USING SMT SOLVERS

Annotation. The article discusses various aspects of testing program code using SMT solvers (Satisfiability Modulo Theories). Using SMT solvers to find errors in program code and prove its correctness in relation to given specifications and properties. This publication will be useful to software developers who are interested in improving the reliability and quality of their code, as well as testing professionals who are looking for methods to optimize the testing process.

Keywords: SMT solver, code testing, testing methods (unit, integration, system, acceptance), static code analysis, static analysis dilemma.

Тестирование кода — это процесс проверки программного кода на соответствие определенным требованиям и ожиданиям. Основная цель тестирования состоит в обнаружении ошибок и дефектов в программном обеспечении до его выпуска, чтобы уменьшить вероятность возникновения проблем в реальной эксплуатации.

В процессе тестирования применяются различные методы, включая модульное тестирование, интеграционное тестирование, системное тестирование, приемочное тестирование и другие. Каждый из этих методов обладает своими особенностями и применяется на различных этапах разработки программного обеспечения.

С развитием выявления уязвимостей и дефектов в языках программирования стали появляться статистические анализаторы, способные автоматически обнаруживать подозрительные участки кода по заранее заданным шаблонам. Такие анализаторы легко интегрируются в среду разработки и могут предупреждать о возможных проблемах. Однако существует известная проблема статического анализа - дилемма: либо применяются строгие методы, которые избегают пропуска ошибок, но могут порождать множество ложных срабатываний, либо уделяется приоритет поиску точного списка проблем, что может привести к упущению реальных ошибок.

Для проверки соответствия логики исходного кода заявленным функциональным требованиям часто формируются специальные команды, которые используют различные инструменты для тестирования кода. Однако иногда бывает сложно гарантировать, что алгоритм всегда достигнет ожидаемого результата во всех возможных случаях, и не всегда можно убедиться, что учтены все возможные состояния программы. Многолетний опыт показывает, что тестирование кода может быть ошибочным наравне с самой программой. Поэтому для проверяющего эксперта было бы желательно наличие инструмента, который позволил бы проводить проверку в автоматическом режиме.

Одним из инструментов, который может быть полезен, это программа, которая преобразует исходный код в скрипт, представляющий программу в формате, совместимом с SMT-решателем. Тестированию будут подвергаться только публичные методы, поскольку только они доступны для вызова пользователями. Чтобы убедиться, что все ожидаемые состояния могут быть достигнуты, а некорректные состояния недостижимы при любых условиях, будет достаточно следующего набора данных:

- Переменные, которые участвуют в алгоритме, включая внутренние переменные метода.
- Логические выражения изменения каждой из этих переменных. Берем во внимание от каких переменных зависит, при каких условиях изменяется и как.

- Условие перехода. Условием перехода является выполнение логических выражений всех переменных в правильной последовательности.
- Начальное состояние системы - набор значений для всех переменных программы после ее инициализации.
- Конечное состояние системы - набор значений для переменных программы, которые должен получить решатель.
- Количество переходов, через которое программа должна пройти, чтобы система из начального состояния превратилась в конечное.

Программа автоматически извлекает или создает все данные, кроме окончательного состояния системы и количества переходов, на основе исходного кода, а остальные данные запрашивает у пользователя. После этого программа генерирует скрипт для SMT-решателя, который затем пытается найти условие, при котором состояние программы после определенного числа переходов будет эквивалентно заданному конечному состоянию.

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*Алижоновна Г.С.
студент магистратуры
Научный руководитель: Мусаев Э.Т.
Ташкентский государственный юридический университет
Узбекистан, г.Ташкент*

ОСНОВНЫЕ ПОДХОДЫ К ЗАЩИТЕ ОБЪЕКТОВ ИНТЕЛЛЕКТУАЛЬНОЙ СОБСТВЕННОСТИ В ВЕБ-САЙТАХ

Аннотация. В данной статье проводится анализ существующих подходов к понятию «веб-сайт» и к его элементам. Основные и наиболее ценные элементы сайта, такие как дизайн программное обеспечение, контент, и база данных подвергаются анализу, а также определяется юридическая природа.

Также раскрыты проблемные моменты защиты объектов интеллектуальной собственности в веб-сайтах, проведен анализ законодательств зарубежных стран и сделаны выводы по усовершенствованию законодательства Республики Узбекистан.

Ключевые слова: интеллектуальная собственность, объект интеллектуальной собственности, веб-сайт, авторское право, смежные права, защита, охрана.

*Alijonova G.S.
master's student
Scientific supervisor: Musaev E.T.
Tashkent State Law University
Tashkent, Uzbekistan*

BASIC APPROACHES TO PROTECTING INTELLECTUAL PROPERTY OBJECTS IN WEBSITES

Annotation. This master's thesis analyzes the existing approaches to the concept of "website" and its elements. The main and most valuable elements of the site, such as design, software, content, and database, are analyzed and the legal nature is determined.

The problematic aspects of protecting intellectual property objects in websites are also disclosed, an analysis of the legislation of foreign countries is carried out and conclusions are drawn on improving the legislation of the Republic of Uzbekistan.

Key words: intellectual property, object of intellectual property, website, copyright, related rights, protection, protection.

Введение

Согласно данным агентства «We are social» и медиа-аналитической платформы Meltware, указанных в отчете Global digital за 2023 г., по состоянию на апрель 2024 года общая численность населения мира составила 8.10 млрд человек. К началу 2023 года 64,4% (приблизительно 5 млрд человек) из общего числа населения мира имеет доступ в Интернет. Согласно показателям счетчика, на официальном сайте Агентства статистики при президенте Республики Узбекистан, к 22 апреля 2024 года в Узбекистане общее число населения превысило 37 миллионов, из которых 31 миллион являются пользователями сети Интернет.

Однако, эти внушающие показатели не могут стать гарантией урегулирования многих вопросов юридического характера, которые возникают параллельно с колоссальным развитием Интернета. Так, на протяжении многих лет важные вопросы, непосредственно касающиеся вопросов урегулирования недостатков данной области, к сожалению, по сей день остаются открытыми. В частности, одним из таких вопросов является определение в гражданско-правовой системе официального правового статуса основных компонентов сети Интернет - интернет-ресурсов и их реализация.

Методы исследования. При написании данной работы использованы: общенаучные методы, такие как исторический метод, аналитический метод, методы дедукции и индукции, а также методы, характерные для юридических наук, такие как: сравнительно-правовой, формально-юридический и другие. Для выявления наилучших международных норм для внедрения, применения и реформирования системы защиты объектов интеллектуальной собственности в веб-сайтах в Республики Узбекистан, основным методом выступает системно-структурный метод исследования.

Результаты оригинального авторского исследования. Есть несколько причин, чтобы принять меры для защиты вашего сайта:

Первая причина заключается в том, что, дав разработчику возможность заблокировать использование его идеи кем-либо, он может получить конкурентное преимущество. Авторское право или патент можно рассматривать как единственную монополию, которая может быть достигнута любой страной и также поощряется страной.

Вторая причина — возможность заработать на продаже своих прав третьим лицам.

Третья причина заключается в том, что, обладая личными, немущественными правами, можно удовлетворить собственные амбиции.

Четвертая причина заключается в том, что защита защищает разработчиков от недобросовестной конкуренции.

Помимо вышеперечисленных причин, есть еще множество, которые напрямую связаны с внешним видом и не имеют никакого отношения к

самому объекту охраны. Например, если имеется патент или иной документ, подтверждающий, в свою очередь, наличие исключительных прав на объект интеллектуальной деятельности, то цена этого объекта почти в два раза превышает цену незапатентованного объекта.

В большинстве случаев создание эффективного финансового плана или использование налоговых льгот более выгодно для защиты.

Как осуществляется охрана интеллектуальной собственности?

Объекты интеллектуальной собственности охраняются законодательством Республики Узбекистан. Кроме того, существует большое количество международных договоров в этой сфере, которые, в свою очередь, определяют способ решения некоторых проблем, в том числе процедурных, или позволяют регистрацию прав интеллектуальной собственности в нескольких странах. Оно может быть передано, лицензировано или иным образом уничтожено. Для защиты объекта интеллектуальной собственности используются различные методы:

- Литературные и художественные произведения, такие как книги, картины, фильмы, музыка, аудио- и видеозаписи, и программное обеспечение, как правило, защищены авторским правом или смежными правами;

- Изобретения и технологии защищены патентами;

- Средства идентификации, отличающие один продукт или услугу от другого, такие как слова, символы, запахи, звуки, цвета и формы, могут быть товарными знаками;

- Физические свойства таких вещей, как мебель, части тела, столовые приборы или украшения, могут охраняться агентствами по промышленным образцам;

- Наименования мест происхождения и коммерческие секреты также являются формами интеллектуальной собственности, и большинство правительств обеспечивают определенный уровень правовой защиты таких объектов;

- Законодательные действия, направленные на предотвращение недобросовестной конкуренции в коммерческой деятельности при одновременном усилении защиты коммерческой тайны и некоторых других видов интеллектуальной собственности.

Многие страны обеспечивают специальную правовую охрану топологий интегральных схем и баз данных. Один и тот же объект может одновременно охраняться несколькими правами интеллектуальной собственности в разных странах.

Авторское право

Оригинальные произведения искусства, музыки и литературы, включая все, от книг и картин до фильмов, видео- и аудиозаписей, и программного обеспечения, подпадают под авторское право.

Эта система прав позволяет авторам получать прибыль от своей работы и поощряет самовыражение. Помимо имущественных прав предоставляются и неимущественные права, которые, с одной стороны, позволяют авторам требовать признания своего авторства, а с другой стороны, защищают свое произведение от любого искажения или изменения, наносящего ущерб репутации автора. Охрана в качестве объекта авторского права предназначена для уникальных и оригинальных творческих произведений и должна быть выражена в какой-либо материальной форме.

Авторское право сопровождает автора с момента создания произведения, а в некоторых странах существует принцип добровольной регистрации, что означает дополнительные преимущества. Авторы могут уступать или передавать эти права по лицензионным соглашениям с момента создания авторского права.

Защита авторских прав дает произведению исключительное право, которое начинается с момента создания произведения и заканчивается через пятьдесят или семьдесят лет после смерти автора.

Что касается авторских прав на аудиозаписи, то их защита обычно заканчивается в течение семидесяти лет после публикации. Закон об авторском праве позволяет правообладателям ограничивать использование своей работы определенным образом. Деятельность по распространению и воспроизведению включается в список запрещенных видов деятельности по единоличному усмотрению автора. В некоторых странах авторы не имеют права запрещать использование своей работы, но они оставляют за собой право на получение оплаты за такие действия. Однако в каждом штате есть исключения на законодательном уровне, позволяющие третьим лицам использовать произведение без оплаты автору или получения его согласия.

Примером этого является использование произведения в иллюстративных или образовательных целях. Важнейшим компонентом авторского права являются средства защиты, предоставляемые законом объекту, а также ограничения и исключения. Обеспечивая равновесие в этих правоотношениях, они способствуют и облегчают создание новых творческих произведений, определяют новые способы их использования и распространения.

Такая же защита распространяется на производителей звукозаписи, вещательных компаний и исполнителей в большинстве стран. В некоторых из этих стран интересы создателей произведений и интересы авторов этих произведений также гарантируются законами об авторском праве. В других странах эти же интересы охраняются соответствующими законами.

Роль авторского права особенно возросла в последние годы в связи с развитием цифровых технологий и всемирной паутины. Это связано с тем, что онлайн-контент требует защиты, а в этой сфере существует множество

сложностей для правоприменительной и судебной защиты, а в основе защиты этого объекта лежит закон об авторском праве.

В настоящее время многие международные договоры определяют защиту авторского права и смежных прав. К таковым относятся Бернская Конвенция об охране литературных и художественных произведений 1886 года, Международная конвенция об охране прав исполнителей, изготовителей фонограмм и вещательных организаций 1961 года, Женевская конвенция об охране интересов производителей фонограмм от незаконного воспроизведения их фонограмм 1971 года, Договор ВОИС по авторскому праву 1996 года, а также Договор ВОИС по исполнениям и фонограммам 1996 года. Последние два упомянутых выше соглашения регулируют защиту музыкальных продюсеров и исполнителей, напрямую связанных с цифровыми технологиями. На сегодняшний день действуют соответствующие конвенции в области охраны и защиты авторского права и смежных прав: Пекинский договор по аудиовизуальным исполнениям 2012 года и Марракешский договор об облегчении доступа слепых и лиц с нарушениями зрения или иными ограниченными способностями воспринимать печатную информацию к опубликованным произведениям 2013 года. Соглашение Всемирной торговой организации (ВТО) по торговым аспектам прав интеллектуальной собственности (ТРИПС) 1994 года, который является первым в истории многосторонним международным договором, регулирующим вопросы торговли в сфере интеллектуальной собственности, в охват которого также входят авторские и смежные права.

Патенты

Предоставление права запрещать другим третьим лицам использовать, производить, продавать и импортировать изобретение достигается путем получения патента. Патенты выдаются государственными органами и имеют больше запретительных функций, чем редакционные. После получения патента изобретатель должен предоставить подробное описание своего изобретения в патентном документе, после чего патент будет размещен в открытом доступе. По сути, патенты — это общественный договор между обществом и изобретателями. Новые изобретения, то есть информация, которую изобретатели не желают разглашать, известны как «ноу-хау» или «коммерческая тайна», и их защита основывается на других законах. Срок патентной защиты в большинстве стран составляет 20 лет с момента подачи необходимых регистрационных документов. Национальные или региональные патентные ведомства предоставляют охрану на основании заявок, поданных изобретателями. Изобретения, отвечающие следующим условиям, могут быть запатентованы:

- Изобретение должно быть новым, что означает, что ранее о нем не публиковались никакие сведения, и оно не использовалось публичным образом;

- Изобретение должно быть промышленно применимым, то есть иметь возможность использования в промышленности или воспроизведения в промышленных масштабах;

- Изобретение должно быть «неочевидным», то есть оно не должно быть решением, которое пришло бы в голову любому, кто имеет определенные навыки в соответствующей сфере.

С течением времени в большинстве штатов возникли национальные патентные системы благодаря нескольким факторам:

- Патентная система поощряет раскрытие информации всем без исключения членам общества, тем самым повышая уровень доступа к техническим и научным знаниям. В отсутствие гарантии, предоставляемой патентом, изобретатель или компания, разрабатывающая изобретение, скорее всего, предпочтут сохранить информацию о своем изобретении;

- Патентная система поощряет инновации и инвестиции в исследования и разработки, а также разработку будущих изобретений и обеспечивает стимулирующие возможности для такой деятельности;

- Ограниченный срок действия патента способствует скорейшему вводу изобретения в коммерческий оборот, позволяя обществу быстрее извлечь из него пользу;

- Поощряя раскрытие подробной информации об изобретениях, патенты позволяют избежать повторных исследований, стимулируя исследования в новых областях, инновационную деятельность и развитие конкуренции;

- Патент воспринимается как надежный правовой титул в сфере интеллектуальной собственности, предоставляемый в большинстве стран по результатам проведения тщательной экспертизы. В течение всего периода своего существования патентная система непрерывно развивалась, чем объясняется ее устойчивость в долгосрочной перспективе.

Целью патентной охраны в настоящее время является регулирование национальной патентной системы, согласование процедурных вопросов, решение вопросов по существу, возникающих при получении патентов в национальных и региональных патентных ведомствах. Имеющими особое значение в данной сфере являются Парижская конвенция по охране промышленной собственности 1883 года и Соглашение ВТО по торговым аспектам прав интеллектуальной собственности (ТРИПС) 1994 года, в то время как основными международными соглашениями, касающимися процедурных вопросов в области патентного права, являются Договор о патентной кооперации 1970 года и Договор о патентном праве 2000 года. Среди региональных договоров можно выделить Европейскую патентную конвенцию (ЕПК) 1973 года. Европейская патентная конвенция определяет порядок получения европейских патентов, которые после их предоставления действуют в заявленных государствах в качестве

национальных патентов. Новая редакция Конвенции (ЕПК 2000 года) и Процедура ее применения вступили в силу в 2007 году.

Промышленные образцы

Защита внешнего вида и упаковки обеспечивается получением прав на промышленный образец. Существует два основных стандарта, в соответствии с которыми промышленные образцы могут охраняться. К ним относятся: 1. Новизна предмета. 2. Оригинальность. Эти термины заимствованы из законов об авторском праве и патентах. Охраняемый промышленный образец должен иметь эстетическую ценность, а это означает, что его техническая функция не должна быть ограничительной и не должна иметь ничего общего с той же схемой дизайна. Промышленные образцы могут быть (2D) чертежами или (3D) моделями. Товар добавляет коммерческую ценность, влияет на конкурентоспособность товаров и является ключевым продуктом во многих отраслях, таких как индустрия моды, производство пользовательского оборудования для мобильных телефонов и так далее.

Охрана промышленных образцов различается в разных странах, но в большинстве стран охрана предоставляется посредством регистрации и постэкспертизы. Объем правовой охраны промышленных образцов в значительной степени превалирует благодаря гармонизации различных этапов международной регистрации, включая гармонизацию применимых норм материального права. Гаагское соглашение о международной регистрации промышленных образцов 1925 года с учетом изменений, внесенных Женевским Актом ВОИС 1999 года, позволяет коллективно направить одну заявку на предоставление правовой охраны промышленным образцам сразу в 65 стран, подписавших соглашение. Недавнее подписание соглашения между Южной Кореей и Соединенными Штатами, а также планы по присоединению к соглашению ряда других стран показывают, что правовая охрана промышленных образцов существует повсюду.

В Европейском союзе наиболее распространенным способом подачи заявки на охрану промышленного образца является подача обращения в Ведомство по интеллектуальной собственности Европейского союза в Аликанте. Управление системой зарегистрированных промышленных образцов осуществляется этим Ведомством.

В результате принятия Регламента № 6/2002 положения материального права были гармонизированы на уровне Европейского союза. Данный регламент ввел право на промышленный образец Сообщества, которое признается во всех государствах участника Европейского союза. Зарегистрированные промышленные образцы могут быть защищены на срок до 25 лет. Срок охраны незарегистрированных промышленных образцов и моделей составляет три года.

Правообладатель промышленного образца имеет полное право предотвращать несанкционированное копирование третьими лицами и

запрещать производство, импорт или экспорт продукции, в которой каким-либо образом используется промышленный образец или модель.

В связи с возрастающим коммерческим значением и интересом к промышленным образцам в современной экономике. Дизайнеры и создаваемые ими промышленные образцы часто уже вовлечены в концептуальную стадию, и что касается технологических разработок в этой области, то можно сказать, что этот прогресс способствует созданию инновационных продуктов и услуг. Но все же, в целях того, чтобы промышленные образцы стали полноценными, широко используемыми и имеющими большой спрос как объект интеллектуальной собственности, есть необходимость в дальнейшей гармонизации законов, регулирующих их использование, кроме того, требуется разработка рекомендаций в отношении возможности и объема их защиты. Однако для того, чтобы промышленные образцы стали ценными, широко используемыми и востребованными в качестве объектов интеллектуальной собственности, необходимо дальнейшее согласование законов, регулирующих их использование, и, кроме того, необходимо предложить объем и возможность их защиты.

Товарные знаки

Потребители и предприятия обращаются к брендам, чтобы дифференцировать товары и услуги от разных производителей. Брендинг хорошо работает для производителей, защищая их продукцию от несправедливой прибыли и повышая доверие к бренду и репутацию. В результате поддерживается честная конкуренция, и компании, производящие продукт или услугу, имеют стимул выделять ресурсы для повышения качества и поддержания высокого мнения о своем продукте.

Защита торговых марок охватывает: товарные знаки, имена, символы, логотипы, цвета и даже запахи и звуки. Владельцы торговых марок имеют право запрещать другим использовать их товарные знаки или названия, которые слишком похожи или похожи, если такое использование может ввести потребителей в заблуждение.

Помимо всего вышперечисленного, охрана товарного знака во многих странах также имеет место при получении необоснованной выгоды от репутации владельца товарного знака.

В настоящее время почти все владельцы коммерческих предприятий имеют собственные товарные знаки, в то время как в развитых странах товарные знаки в основном используются во имя защиты прав и интересов компаний.

Заключение

По итогу проведенной попытки комплексного анализа и исследования особенностей правового регулирования «веб-сайтов» как объектов интеллектуальной собственности в Республике Узбекистан, а также их защиты и договорного регулирования, путем изучения зарубежного опыта,

позволили обозначить то, что в современном, развивающемся и правовом обществе, веб-сайты, с каждым днем становятся все более актуальными и связанными с каждой сферой деятельности человека.

Исследования в сфере договорных отношений позволили нам сделать вывод о том, что немаловажным фактором является необходимость путем внесения дополнений и изменений в законодательство, создания обязательных условий для заключения договоров между субъектами правоотношений в сфере интеллектуальной деятельности, таких как «договор авторского заказа» и «договор возмездного оказания услуг», что в свою очередь позволит закрепить законное право одной из сторон договора на обладание им защиты, в случае возникновения спорной или конфликтной ситуации, когда необходимо вмешательство государственных органов для полного, точного и скорейшего её разрешения.

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**Аллаев Ж.
Ибодуллаева Д.А.**
Чирчикский государственный педагогический университет
Узбекистан, Чирчик

РАЗВИТИЕ ИНТЕЛЛЕКТУАЛЬНОЙ СПОСОБНОСТИ СТУДЕНТОВ В ОБУЧЕНИИ ХИМИЧЕСКИХ ДИСЦИПЛИН

Аннотация. В статье рассматривается необходимость развития интеллектуальной способности студентов в обучении химических дисциплин в педагогическом вузе. Предлагаются пути развития развивающих способностей студентов на примере учебных дисциплин “Аналитическая химия”, “Физ-коллоидная химия”, “Химия лекарственных веществ” факультета “Естественных наук” Чирчикского государственного педагогического университета. Речь идёт об этапах развития интеллектуальной способности студентов в процессе их обучения химических дисциплин.

Ключевые слова: естественные науки, аналитическая химия, физ-коллоидная химия, химия лекарственных веществ, развитие, интеллектуальность, способность.

**Allaev J.
Ibodullayeva D.A.**
Chirchik State Pedagogical University
Uzbekistan, Chirchik

DEVELOPMENT OF STUDENTS' INTELLECTUAL ABILITY IN TEACHING CHEMICAL DISCIPLINES

Annotation. The article considers the need to develop the intellectual ability of students in teaching chemical disciplines in pedagogical universities. The ways of developing students' developing abilities are proposed using the example of the academic disciplines “Analytical Chemistry”, “Physical colloidal chemistry”, “Chemistry of medicinal substances” of the faculty “Natural Sciences” of Chirchik State Pedagogical University. We are talking about the stages of developing the intellectual ability of students in the process of their study of chemical disciplines.

Keywords: natural sciences, analytical chemistry, physic colloidal chemistry, chemistry of medicinal substances, development, intelligence, ability.

Сегодня в мире проблемы успешности университетского образования и развития интеллектуальных способностей студентов находятся под пристальным вниманием ученых всего мира, что обуславливает проведение

широкомасштабных научно-методических исследований [1;2]. Учёные - методисты отмечают [3], эффективность образовательного процесса зависит не только от того, насколько высоки возможности подготовки выпускников средней школы в прединiversитетский период, но и от того, как организован учебный процесс, а также от педагогических способностей и возможностей педагогов[4]; индивидуальных психологических особенностей студентов[5]. На последнем факторе остановимся подробнее. Под индивидуальными психологическими особенностями студентов подразумевается уровень интеллекта (способность усваивать знания, умения, навыки и успешно применять их для решения задач) [6], креативность (способность самому вырабатывать новые знания) [7], учебная мотивация и владение навыками планирования и контроля учебной деятельности [8]. К сожалению, в научных публикациях на эту тему отсутствует четкая стратегия формирования и развития интеллектуального потенциала студентов [9]. По их мнению, [10], именно развитие интеллектуальных способностей позволяет повысить продуктивность учебной деятельности. Период адаптации студента первого года обучения к условиям высшей школы проходит всегда очень тяжело, а у студента, отсутствие фундамента по химическим дисциплинам, особенно выделяется [11]. Это связано, прежде всего, с необычной социокультурной средой, трудностями восприятия учеником незнакомой ему информации и часто с недостаточностью знаний и умений, полученных в средней общеобразовательной школе, и слабой подготовленностью к предметам. По данным вступительного тестирования, проводимого на кафедре химии и факультета естественных наук, общеобразовательных дисциплин ЧГПУ, доля сильных и средних абитуриентов, которые дали более 65% правильных ответов на вопросы по профилирующим предметам, составляет менее одной трети. При этом очевидно, что 15-20% абитуриентов имеют практически очень слабые базовые знания по химии, а потому целесообразно их переподготовить на ускоренной основе, чтобы не отставать в развитии интеллектуальных способностей от студентов основной группы [12]. Интересно отметить, что студенты естественнонаучных специальностей обладают зачастую более высоким интеллектуальным потенциалом и поэтому быстрее усваивают учебную программу. Проведение дополнительных занятий с целью дальнейшего развития интеллектуальных способностей и аналитического мышления учащихся создает для них широкие возможности в освоении предметов и вселяет в них уверенность в своих силах [13]. Задача студента первого года обучения не только овладеть языком предмета и углубить знания в предметной области, но и научиться быстро и эффективно усваивать новую научную информацию [14]. Для развития интеллектуальных способностей можно использовать специальные курсы-тренинги, например: — «Развитие памяти» — эффективные приемы запоминания информации; — «Учись учиться» —

навыки самостоятельной работы с текстовой информацией; — «Психология сдачи экзамена» — коммуникативные навыки общения с преподавателями и однокурсниками; — «Планирование учебного времени» и т.д. Элементы данных тренингов могут быть включены в систему преподавания каждой учебной дисциплины. Решение на учебном занятии логических задач, выполнение упражнений на развитие внимания и приемов активизации мышления позволит добиться желаемых результатов. Кроме того, все естественные науки, как науки экспериментально-теоретические, служат прекрасным учебным пространством для развития интеллектуальных и творческих способностей студентов. В основе их изучения лежит познавательная деятельность. Так, например, в химических дисциплинах изучение свойств веществ и закономерностей химических процессов основано на анализе экспериментальных данных, их интерпретации и обобщении. Так развивалась наука химия, делались великие открытия. Процесс познания уже открытых законов и теорий проходит тот же путь — от накопления экспериментальных фактов к их пониманию. Способность анализировать, обобщать полученную информацию и интерпретировать ее, используя уже известные законы, необходима для овладения химическими знаниями. При этом используются все мыслительные операции: анализ, синтез, обобщение, сравнение, классификация. Поэтому для понимания химии необходимо иметь развитое мышление, внимание, воображение. В свою очередь, наука химия развивает познавательные способности учащихся, так необходимые для изучения и других предметов. Студент запоминает информацию во время чтения учебного текста, слушания лекции, проведения эксперимента и самостоятельного размышления. В это время активно используются все виды речевой деятельности: говорение и слушание, чтение и письмо. Для качественного владения всеми речевыми навыками необходимо иметь развитое внимание, мышление и воображение. Именно эти способности формируют умственный потенциал студента, обеспечивают качественное понимание и запоминание любой учебной информации. Практические занятия — это не только наблюдение за опытами, которые демонстрирует преподаватель, но и самостоятельное проведение простейших химических экспериментов, и решение экспериментальных задач. Демонстрационные опыты проводятся в основном на лекционных занятиях. В качестве демонстрационных опытов наиболее интересны эксперименты по химии элементов. Преподаватель предлагает прогнозировать результаты эксперимента. Такой тип химического эксперимента стимулирует познавательную активность учащихся, побуждает к сознательному совершенствованию знаний, дает эмоциональную разгрузку. Самостоятельно студенты учатся работать с химической посудой и реактивами на примере практических работ по лабораторные работы «Качественные реакции катионов и анионов» и «Буферные системы и потенциометрические титрования», «Качественный

анализ лекарственных веществ» просты в исполнении, относительно безопасны, не требуют большого времени на подготовку и проведение и отличаются наглядностью демонстраций. Преподаватель предлагает студентам самостоятельно проследить изменение свойств исследуемых веществ в зависимости от среды реакции и сформулировать выводы. Проведение самостоятельного исследования предлагается на экспериментальной работе «Количественное изучение обратимого гидролиза соли». Работа заключается в экспериментальном определении водородного показателя рН раствора, расчете степени гидролиза соли, константы гидролиза и константы диссоциации слабого электролита. Расчетное значение константы диссоциации сравнивают с табличным. Практическая часть работы проста и требует только умения приготовить растворы заданной молярной концентрации. Дидактическая ценность заключается в закреплении понятий «степень и константа гидролиза». Экспериментальные задачи интересно поставлены также на примере качественных реакций на анионы и катионы. Такие практические задания могут быть полезны в теме «Свойства солей» в тематическом блоке «Кислотно - основные метода анализа». При решении экспериментальных задач студенты не только совершенствуют свои знания, применяя их на практике, но и учатся выделять, анализировать, сопоставлять существенные признаки и обобщать полученные результаты. Программа любого вида учебного эксперимента ориентирована не на запоминание, а на понимание изучаемых химических явлений. Только при таком подходе учащийся способен выявить взаимосвязь строения и свойств веществ. По всем видам практических работ (демонстрационным, самостоятельным экспериментам, экспериментальным задачам) студенты составляют отчет: описывают последовательность проведения эксперимента, приводят химические реакции, записывают наблюдения и делают выводы о свойствах веществ или заключения о качественном составе веществ в случае решения экспериментальных задач. В конце занятия студенты защищают свои идеи в устной форме. Таким образом, на практических занятиях используются все виды речевой деятельности (чтение, письмо, говорение и слушание). На уроках большая часть времени отводится решению расчетных и расчетно-экспериментальных задач, которые развивают мыслительные способности учащихся, то есть логичность, активность мышления. Необходимо, чтобы студенты научились моделировать «свои», нестандартные способы решения. Использование разработанных алгоритмов решения обедняет учебный процесс, не позволяет развить так называемое «химическое мышление». Задача преподавателя — «разбудить» креативные способности студента, найти оптимальный для него способ мышления и запоминания информации. Раскрыть творческий потенциал учащихся позволяет проектная деятельность в форме написания реферата. Умение самостоятельно составить план, выбрать необходимую информацию,

скомпоновать ее и сделать выводы является необходимым условием для дальнейшего успешного обучения на основных факультетах. Студенты учатся индивидуально работать с учебной литературой, расширяют словарный запас и глубоко прорабатывают учебный материал по заданной теме. На кафедре разработано специальное пособие, в котором представлены требования к учебному проекту, модель проекта и учебного плана, рекомендуемая литература и правила составления ссылок на учебную литературу. Самые успешные студенты имеют возможность выступить перед однокурсниками с небольшим докладом и ответить на их вопросы. Правильная формулировка вопроса — непростая задача для иностранного учащегося. Таким образом, в этой форме учебной работы также удастся сочетать все виды речевой деятельности (чтение, письмо, говорение и слушание). Именно на этапе подготовительного обучения следует отрабатывать навыки, необходимые не только для учебной, но и исследовательской деятельности: умение видеть проблему, находить пути и методы ее решения, классифицировать явления, структурировать материал, выдвигать гипотезы, защищать свои идеи. Преподаватель-предметник, учитывая социально-психологические особенности иностранного студента, может и должен помочь ему раскрыть свой интеллектуальный потенциал, найти наиболее продуктивный способ усвоения учебного материала, развить креативность, активность и гибкость мышления, открыть путь для полноценного профессионального роста.

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*Атаджанова Р.Б.
доцент
Ягафарова Н.Р.
преподаватель
кафедра «Общеобразовательных
предметов и физической культуры» ТКТИ
Янгиерский филиал*

РОЛЬ ПРОЕКТНОЙ РАБОТЫ В ФОРМИРОВАНИИ СОЦИОЛИНГВИСТИЧЕСКОЙ КОМПЕТЕНЦИИ

Ключевые слова: коллаборация, социолингвистика, социокультура, контекст, компетенция, обучение, аргота.

*Atajanova R.B.
associate professor
Yagafarova N.R.
teacher
department of "General educational subjects and physical culture"
TKTI Yangiersky branch*

THE ROLE OF PROJECT WORK IN THE FORMATION OF SOCIO-LINGUISTIC COMPETENCE

Key words: collaboration, socio-linguistics, socioculture, context, competence, training, argot

Введение. Современное образование ставит перед учащимися потребность не только в усвоении языковых навыков, но и в развитии более широкого спектра компетенций, включая социолингвистическую компетенцию. Социолингвистическая компетенция играет важную роль в формировании у студентов понимания языковых явлений в контексте социокультурной среды.

Проектная работа предполагает активное участие студентов в исследовательской деятельности, позволяя им самостоятельно изучать языковые явления в различных социокультурных контекстах, анализировать их и взаимосвязь с общественной действительностью. В данной статье мы рассмотрим важность проектной работы в обучении языкам, особенно в контексте формирования социолингвистической компетенции. Будет рассмотрено определение социолингвистической компетенции, роль проектной работы в ее развитии, а также конкретные методы и этапы использования проектов для эффективного формирования данной компетенции у учащихся. Данная статья призвана проанализировать

важность использования проектной работы как инструмента обучения, способствующего не только повышению языковых компетенций, но также развитию понимания языка как социокультурного явления.

Социолингвистическая компетенция представляет собой ключевую составляющую языковой компетенции, обеспечивающую способность индивида к адекватному использованию языка в различных социокультурных ситуациях. Эта компетенция включает в себя не только знание языковых структур, но и понимание языковой среды, влияния социокультурных факторов на языковое поведение, а также умение адаптировать свое языковое поведение в соответствии с социокультурными нормами и ожиданиями. В контексте обучения языкам, социолингвистическая компетенция включает в себя умение анализировать языковые явления в социокультурном контексте, интерпретировать языковые проявления с учетом социальных, исторических и культурных особенностей, а также использовать языковые ресурсы для эффективного общения в различных сферах жизни.

Основные аспекты социолингвистической компетенции включают в себя понимание диалектов, аргота, жаргона, умение анализировать языковые среды и их воздействие на коммуникацию, а также критическое отношение к языковым явлениям с учетом социокультурного контекста. Развитие данной компетенции позволяет учащимся не только более эффективно использовать язык в общении, но и быть осведомленными об уникальных особенностях языка как социокультурного явления.

Социолингвистическая компетенция: понятие и значение

Основные аспекты социолингвистической компетенции включают в себя умение адаптировать свою коммуникативную стратегию в зависимости от социокультурных норм и ценностей, анализировать языковые проявления в различных контекстах и оценивать их влияние на взаимодействие. Другими словами, социолингвистическая компетенция помогает расширить спектр языковых знаний студентов, включая в него их социокультурное измерение. **Значение развития социолингвистической компетенции для учащихся**

Социолингвистическая компетенция является важным аспектом языкового образования, который играет значительную роль в формировании учащихся не только как эффективных языковых носителей, но и как культурно осознанных и компетентных членов общества. Давайте рассмотрим, какое значение имеет данная компетенция для учащихся.

1. Межкультурное взаимодействие: Развитие социолингвистической компетенции обогащает учащихся пониманием разнообразных культур и традиций. Они учатся адаптировать свое языковое поведение в зависимости от социокультурного контекста и строить эффективное взаимодействие с представителями других культур, способствуя толерантности и межкультурному диалогу.

2. Критическое мышление: Развитие социолингвистической компетенции стимулирует учащихся к критическому анализу языковых явлений с учетом социокультурного контекста. Это способствует формированию способности критически мыслить, анализировать информацию и оценивать различия в языковом поведении.

3. Эффективное общение: Умение осознанно использовать язык в социокультурном контексте позволяет учащимся строить эффективные коммуникативные стратегии и успешно общаться с людьми из разных культур и языковых групп.

4. Профессиональное развитие: В современном мире, где международное сотрудничество становится все более важным, развитие социолингвистической компетенции дает учащимся преимущество на рынке труда. Умение эффективно взаимодействовать с представителями разных языковых и культурных групп способствует развитию международных деловых связей и карьерному росту.

Возможности проектной работы для развития социолингвистической компетенции

Современное образование ставит перед собой задачу не только передать знания, но и формировать у учащихся комплекс навыков и умений, необходимых для успешной адаптации в современном обществе.

1. Многоязычное общество: Современное общество становится все более многоязычным, и умение эффективно общаться на различных языках становится ключевой компетенцией.

2. Межкультурное взаимодействие: Развитие социолингвистической компетенции помогает учащимся понимать межкультурные различия, быть толерантными и уважительно относиться к другим культурам.

3. Коммуникативные навыки: Социолингвистическая компетенция развивает коммуникативные навыки учащихся, позволяя им эффективно общаться, учитывая социокультурные особенности аудитории.

4. Толерантность и уважение: Развитие социолингвистической компетенции способствует формированию толерантного отношения к различиям, уважению к многообразию культур и языковых традиций.

5. Готовность к глобальному рынку труда: В современном мире, где международное сотрудничество становится все более важным, социолингвистическая компетенция дает учащимся преимущество. Умение эффективно общаться на разных языках, адаптировать свое поведение к культурным особенностям различных стран и успешно работать в международных коллективах становится важным конкурентным преимуществом.

Заключение В заключение, можно отметить, что проектная работа играет значительную роль в формировании социолингвистической компетенции у студентов. Через участие в проектах студенты не только улучшают свои языковые навыки, но и развивают понимание

социокультурного контекста, умение взаимодействовать с представителями других культур, а также критически анализировать языковые явления и стереотипы.

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*Атажанова Н.М.
Ургенческий инновационный университет
Узбекистан, Хорезм*

СОВРЕМЕННЫЕ ПРОБЛЕМЫ ЛИНГВИСТИКИ: ИЗУЧЕНИЕ ПЕРЕМЕЩАЮЩЕГОСЯ ЯЗЫКА, ПСИХОЛОГИИ, ТЕХНОЛОГИИ И ОБЩЕСТВА

Аннотация. В данной статье рассматриваются наиболее видные современные проблемы, с которыми сталкивается лингвистика в настоящее время. Развивающаяся природа языка вместе с интеграцией с другими областями, такими как психология и технологии, создала проблемы, включая языковые вариации и изменения, многоязычие, технологии, язык и мышление, искусственный интеллект и машинное обучение, диалектологию, влияние социальных сетей, речь и язык, патология, транслингвистика и корпусная лингвистика. Для эффективного решения этих проблем требуется междисциплинарный подход, и они открывают возможности для инноваций и развития лингвистики.

Ключевые слова. Лингвистика, языковые вариации и изменения, многоязычие, технологии, язык и мышление, диалектология, патология речи и языка, транслингвизация, корпусная лингвистика.

*Atajanova N.M.
Urgench innovation university
Uzbekistan, Kharezm*

CONTEMPORARY ISSUES IN LINGUISTICS: THE STUDY OF MOVING LANGUAGE, PSYCHOLOGY, TECHNOLOGY AND SOCIETY

Abstract. This article identifies the key challenges facing linguistics today, including the complexities of language variation and change, multilingualism, and the impact of technology and social media on language use. The field is also grappling with the integration of linguistics with psychology, artificial intelligence, and machine learning, as well as the study of dialectology, pathology, and corpus linguistics. To effectively address these challenges, linguistics requires an interdisciplinary approach that fosters innovation and development.

Keywords. Linguistics, language variations and changes, multilingualism, technology, language and thinking, dialectology, speech and language pathology, translanguaging, corpus linguistics.

Лингвистика, отрасль социальных наук, за последние годы стала свидетелем значительного развития и прогресса. Однако он также столкнулся с различными современными проблемами, с которыми постоянно сталкиваются исследователи и лингвисты. Эти проблемы возникли в результате развития природы языка, а также интеграции лингвистики с другими областями, такими как психология и технология. В этой статье мы рассмотрим некоторые из наиболее известных современных проблем языкознания.

Одной из основных задач современной лингвистики является изучение языковых вариаций и изменений. Язык — это динамическая сущность, которая постоянно развивается во времени благодаря использованию его носителями в разных контекстах. Лингвисты стремились понять факторы, влияющие на языковые вариации, такие как географическое положение, социальный класс и возраст. Однако с глобализацией и развитием цифровой коммуникации языки все чаще контактируют друг с другом, что приводит к языковой конвергенции или даже к утрате языка. Это явление создает проблемы с точки зрения поддержания языкового разнообразия и сохранения языков, находящихся под угрозой исчезновения, а также понимания последствий изменения языка для общения и идентичности. По данным Хау и Иноуэ (2017), некоторые лингвисты изо всех сил пытаются найти коренных носителей языков меньшинств, тем самым затрудняя всесторонний анализ их синтаксиса, морфологии и фонетики.

Еще одной актуальной проблемой современной лингвистики является изучение многоязычия. В условиях глобализации и роста миграции общества становятся все более многоязычными. Многоязычие имеет как лингвистические, так и социокультурные последствия. Лингвисты работают над пониманием когнитивных аспектов, связанных с овладением языком, двуязычием и языковой обработкой. Они исследуют такие вопросы, как то, как языки хранятся в мозгу и как они взаимодействуют друг с другом. Кроме того, многоязычие поднимает вопросы о языковой политике и планировании, поскольку обществу необходимо учитывать потребности различных языковых сообществ. Лингвистическое разнообразие является реальностью в современном глобализованном мире, где во всем мире говорят на более чем 7000 языках. Уловить, понять и использовать это лингвистическое разнообразие для создания глобальных платформ, способных обслуживать все языковые группы, остается непростой задачей для лингвистов. Важность отражения этого разнообразия невозможно переоценить. По данным Всемирного экономического форума (2018 г.), многоязычие является фактором роста экономики и международной торговли. Во время Global Wellness Summit 2018 Пааво Вирккунен, финский специалист по образованию, заявил, что обучение детей нескольким языкам удваивает их когнитивные способности, а это повышает их перспективы

трудоустройства в будущем (Всемирный экономический форум, 2018). Поэтому крайне важно собирать и использовать эти разнообразные лингвистические знания.

Одной из наиболее важных проблем, с которыми сегодня сталкиваются лингвисты, является исследование языка и мышления. Эта междисциплинарная область, известная как когнитивная лингвистика, исследует взаимосвязь между языком и познанием. Исследователи стремятся понять, как язык формирует наше восприятие и понимание окружающего мира. Они также исследуют влияние языка на различные когнитивные процессы, такие как память и принятие решений. Однако изучение сложной связи между языком и мышлением требует сложных экспериментальных планов и всестороннего анализа, что делает эту задачу сложной задачей для лингвистов.

Технологии также поставили новые задачи в области лингвистики. В последние годы компьютерная лингвистика быстро развивается, и исследователи используют компьютерные модели и алгоритмы, чтобы лучше понять структурные аспекты языка, а также для разработки таких приложений, как машинный перевод и программы изучения языка. Однако этот технологический прогресс имеет свой собственный набор проблем. Например, системы автоматического перевода часто сталкиваются с нюансами и культурными отсылками, что приводит к неточным переводам. Кроме того, сбор и анализ огромных объемов лингвистических данных, особенно в контексте онлайн-общения, поднимает вопросы о конфиденциальности, безопасности и этике.

С появлением искусственного интеллекта и машинного обучения традиционный ландшафт лингвистики претерпевает значительные изменения. Разработка моделей, которые смогут понимать, интерпретировать и генерировать человеческий язык, является постоянной задачей. Это также привело к появлению новых лингвистических областей, таких как компьютерная лингвистика. С появлением искусственного интеллекта и машинного обучения растет спрос на более совершенные алгоритмы обработки естественного языка. Однако это требует более глубокого понимания человеческого языка, и некоторые лингвисты пытаются понять, как интегрировать сложности языка в алгоритмы машинного обучения (Huang & Xu, 2020).

Быстрый взрыв платформ социальных сетей привел к всплеску «нестандартных» и гибридных языков. Понимание этого нового ландшафта и того, как он влияет на лингвистические правила и положения, является захватывающей и важной задачей. По словам Андроутсопулоса (2015), развитие социальных сетей привело к появлению новых форм языка, которые являются «нестандартными» и «гибридными». Он утверждает, что необходимо понять влияние этих новых форм языка на лингвистические

правила и положения. Это представляет собой интересную и серьезную задачу для лингвистов и исследователей в этой области.

Большое количество языков мира находится на грани исчезновения. Сохранение и возрождение этих языков, а также документирование их словарей и грамматических структур до того, как они исчезнут, является неотложной задачей. Важность сохранения языков, находящихся под угрозой исчезновения, невозможно переоценить. Как заметил лингвист К. Дэвид Харрисон: «Когда язык умирает, уникальное окно в человеческое познание, социализацию и культурную идентичность закрывается навсегда» (Harrison, 2007). Поддерживая усилия по документированию и возрождению этих языков, мы можем помочь гарантировать, что это богатое разнообразие сохранится для будущих поколений.

Поскольку многоязычие становится нормой во многих частях мира, лингвисты сталкиваются с проблемой понимания и определения «транслингвизма» – практики переключения между языками в рамках одного разговора. Транслингвизация — это не просто переключение кода, поскольку оно предполагает использование множества лингвистических ресурсов для построения значения, а не просто замену слов из одного языка в другой (García & Li, 2014). Эта практика подчеркивает сложные взаимоотношения между языками и изменчивость языковой идентичности в многоязычных сообществах.

Растет интерес к пониманию того, как наш мозг обрабатывает речь, включая нейробиологические основы овладения, понимания и воспроизведения языка. Однако отсутствие надежных моделей и методов представляет собой проблему. Гродзинский и Санти (2008) отметили, что существует ряд различных подходов к исследованию нейробиологических основ языка. Некоторые исследователи используют методы визуализации мозга для изучения активности мозга во время языковых задач, в то время как другие исследуют генетические и молекулярные механизмы, участвующие в развитии речи. Однако для достижения значительного прогресса необходимы более надежные модели и методы, которые помогут исследователям понять сложную природу языковой обработки в мозге.

Диалекты представляют языковое разнообразие внутри языка. Выявление, классификация и понимание социокультурных последствий различных диалектов является сложной задачей. Это особенно актуально в крупных, многоязычных и мультикультурных странах. По мнению Лабова (2013), диалекты — это не просто вариации стандартного языка, а местные разновидности, которые могут демонстрировать различия в произношении, словарном запасе и грамматике. Эти различия часто отражают социальные и культурные факторы, такие как регион, этническая принадлежность или социально-экономический статус. Поэтому понимание диалектов требует не только лингвистического анализа, но и культурного и исторического контекста.

Речевые и языковые расстройства затрагивают значительный процент населения мира. Понимание, диагностика и лечение этих состояний, особенно у многоязычных людей, продолжают оставаться сложной областью исследований. Диагностика и лечение речевых и языковых расстройств, особенно у многоязычных людей, является сложной областью исследований. Текущие исследования показывают, что необходима комплексная оценка, учитывающая языковой и культурный фон человека (Gildersleeve-Neumann, 2016). Кроме того, была доказана эффективность вмешательств, учитывающих культурные особенности и адаптированных к потребностям человека (Васкес и Пенья, 2012).

Сбор, управление и анализ огромных наборов данных о языках, особенно о недоминирующих языках, остается сложной задачей. Одной из проблем корпусной лингвистики является потребность в специализированном программном обеспечении и инструментах для управления и анализа больших наборов данных. Как отмечают Файзи, Нур и Ахмад (2018), многие программы, используемые в корпусной лингвистике, были разработаны для работы с доминирующими языками, такими как английский, и могут не подходить для работы с наборами данных на недоминирующих языках. Это может затруднить точную обработку и анализ языковых данных на этих языках, которые могут иметь структуру и соглашения, отличные от доминирующих языков.

Для эффективного решения каждой из этих проблем требуется междисциплинарный подход и обширные исследования. Мы надеемся, что благодаря постоянному развитию технологий будут разработаны более надежные инструменты и методы для решения этих сложностей. Это захватывающая эпоха для лингвистики, полная возможностей революционизировать наше понимание языка и коммуникации.

В заключение отметим, что современная лингвистика решает множество сложных проблем, обусловленных меняющейся природой языка, глобализацией, технологиями и постоянно растущей интеграцией лингвистики с такими областями, как психология, искусственный интеллект и нейробиология. Такие проблемы, как изменение и утрата языков, многоязычие, язык и познание, а также технологические последствия, представляют собой насущную проблему. Несмотря на сложную задачу, которую они представляют, они также предоставляют огромные возможности для развития, инноваций и лучшего понимания языка, и общения. Благодаря постоянному развитию технологий и продолжающейся эволюции междисциплинарных подходов лингвисты хорошо подготовлены к решению этих сложностей, стремясь найти эффективные решения для улучшения нашего глобального лингвистического ландшафта.

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*Ахмедов А.Т.
Жиззах политехника институти
“Умумтехника фанлари” кафедраси ассистенти
Роот Э.
Хорижий тиллар ва мутахассислик кафедраси доценти
МГСУ (Москва давлат қурилиш университети)*

ТАКОМИЛЛАШТИРИЛГАН СЎТАЯНЧГИЧ ҚУРИЛМАНИНГ ТЕХНОЛОГИК ИШ ЖАРАЁНИ

Аннотация. Қобикли сўтанинг физик-механик хоссаларини ўрганиш мақсадида Республикамизда етиштирилаётган маккажўхорининг навлари ҳақида маълумот тўпланди. Ҳозирги даврга келиб, мамлакатимизда экин учун маккажўхорининг йиғирма бир турдаги навлари тавсия этилган. Улардан уч тури ўрташиар, етти тури кечшиар ва ўн бир тури эрташиар навлардир.

Калит сўзлар: Қобикли сўталар, физик-механик хоссалар, ўлчам-масса, навлар, сўталарнинг таркиби, қобиклар сони, массаси, қобикларнинг узунлиги, эни ва қалинлиги, вариация коэффицентлари.

*Akhmedov A.T.
Jizzah Polytechnic Institute
assistant
Department of "General Engineering Sciences"
Root E.
associate professor
Department of Foreign Languages and Specializations
MGSU (Moscow State Construction University)*

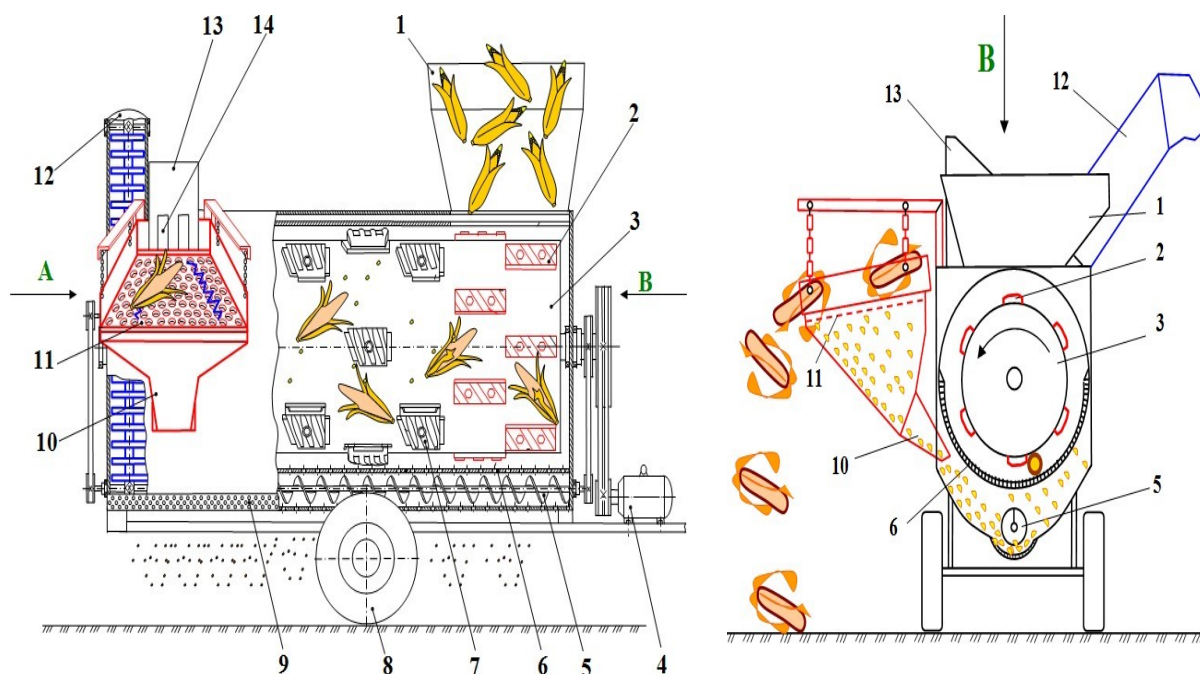
MORPHOLOGICAL COMPOSITION AND DIMENSION-MASS INDICATORS OF SHELLED STUFF

Annotation. In order to study the physico-mechanical properties of husked corn, information was collected about the varieties of corn grown in our Republic. To date, twenty one varieties of corn have been recommended for planting in our country. Among them, three types are medium-ripening, seven types are late-ripening and eleven types are early-ripening varieties.

Keywords: Shelled beans, physical-mechanical properties, size-mass, varieties, composition of pods, number of shells, mass, length, width and thickness of shells, coefficients of variation.

Такомиллаштирилган сўтаянчгич қурилманинг технологик иш жараёни қуйидаги усулда амалга оширилади (1-расм): қобикли сўталар

сўтаянчгичнинг қабул қилиш бункери 1 орқали бошланғич қисмида сидирадиган планкалар 2 га эга бўлган янчиш барабани 3 га ташлаб берилади. Янчиш барабани 3 қобикли сўталарни сидирадиган планкалар 2 билан барабан 3 ва унинг декаси 6 орасидаги ишчи тирқишга олиб киради.



- 1 – қабул қилиш бункери; 2 – сидирадиган планка; 3 – янчиш барабани; 4 – электр двигател; 5 – дон шнеги; 6 – барабан декаси; 7 – тўқмоксимон янчгич ишчи қисм;
8 – ғилдирак; 9 – дон шнеги тағлиги; 10 – нов; 11 – ғалвир; 12 – дон юклаш транспортери; 13 – ўзак ва қобик чиқиш туйнуги; 14 – ирғитадиган планкалар

1-расм. Такмиллаштирилган сўтаянчгичнинг технологик схемаси.

Бу қисмда барабаннинг сидирадиган планкалари сўталарнинг қобикларини титиб беради ва уларни барабаннинг янчиш қисмига ўтказиб юборади. Ишчи ораликда барабан юзасига ўрнатилган тўқмоқли янчгичлар 7 сўталарга механик таъсир бериб, уларни ўқ бўйича ҳаракатлантиради ҳамда бутун янчиш аппарати юзаси бўйлаб янчади. Сўта ўзаклари ва қобиклари планкали ирғитгич 14 ёрдамида чиқиш туйнуги 13 орқали ташқарига чиқади ва ғалвирли мослама 11 устига келиб тушади. Ғалвир юзасида ўзак ва қобикқа қўшилиб чиқаётган дон ғалвир ёрдамида ажратилади ва нов 10 орқали дон шнеги 5 устига қайтариб ташланади. Янчилган донлар дека 6 тешикларидан пастга ўтиб, дон шнегига келиб тушади. Дон шнек орқали юклаш транспортери 12 га етказиб берилади ва у ёрдамида қошларга ёки ташиш воситаларига юкланади. Доннинг ўлчамларидан кичик бўлган майда аралашмалар дон шнегининг тағлиги 9 нинг тешиклари орасидан ажралиб пастга тушади. Сўтаянчгич электр

двигател 4 ёрдамида ёки тракторнинг қувват олиш валидан ҳаракат олиб ишлайди.

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*Ахмедов А.Т.
Жиззах политехника институти
“Умумтехника фанлари” кафедраси ассистенти
Петруня О.Э.
Московский авиационный институт*

ТАКОМИЛЛАШТИРИЛГАН ҚУРИЛМАНИНГ СИДИРИШ ЗОНАСИДА СЎТА ҚОБИҚЛАРИНИНГ ТИТИЛИШ ЖАРАЁНИНИ

Аннотация. Ўтказилган назарий тадқиқотлар асосида аниқланган юзага эга бўлган сидирадиган планкани сўтаянчгичнинг иш сифат кўрсаткичларига таъсирини ўрганиш мақсадида сўтаянчгич қурилманинг лаборатория стенди тайёрланиб, экспериментал тадқиқотлар ўтказилди.

Калит сўзлар: Қобиқли сўталар, физик-механик хоссалар, ўлчам-масса,

навлар, сўталарнинг таркиби, қобиқлар сони, массаси, қобиқларнинг узунлиги, эни ва қалинлиги, вариация коэффициентлари.

*Akhmedov A.T.
Jizzah Polytechnic Institute
assistant
Department of "General Engineering Sciences"
Petrunya O.E.
Moscow Aviation Institute*

THE PROCESS OF CUTTING OF SOD SHELLS IN THE SHIFTING ZONE OF THE IMPROVED DEVICE

Annotation. Based on the theoretical studies, a laboratory stand of the heating device was prepared and experimental studies were carried out in order to study the effect of the heat-absorbing plate heater with a defined surface on the work quality indicators.

Keywords: Shelled beans, physical-mechanical properties, size-mass, varieties, composition of pods, number of shells, mass, length, width and thickness of shells, coefficients of variation.

Мухтарам Президентимиз Шавкат Мирзиёев 2020 йил 29 декабрь куни Олий Мажлисга йўллаган Мурожаатномасида, камбағалликни қискартириш ва қишлоқ аҳолиси даромадларини кўпайтиришда энг тез натижа берадиган омил бу—қишлоқ хўжалигида ҳосилдорлик ва самарадорликни кескин ошириш эканлигини алоҳида таъкидлаб ўтдилар.

Ўтказилган назарий тадқиқотлар асосида аниқланган юзага эга бўлган сидирадиган планкани сўтаянчгичнинг иш сифат кўрсаткичларига

таъсирини ўрганиш мақсадида сўтаянчгич қурилманинг лаборатория стенди 1-расм) тайёрланиб, экспериментал тадқиқотлар ўтказилди.



1-расм. Сўта қобикларини титилиш жараёнини ўрганиш учун лаборатория стенди

Шунингдек, олиб борилган тажрибавий тадқиқотларнинг натижалари таҳлил қилинди.

Ушбу тажрибаларда барабаннинг айланишлар сони 600 айл/мин., сидирадиган планкалар сони 6 донани ташкил этган ҳолда, сидирадиган планка ва дека орасидаги тирқиш 36 мм дан 44 мм гача 2 мм оралиқда ўзгартирилиб, иш сирти тўғри тишли, қия тишли ва рифелли планкалар таққослаб кўрилди.

Тўғри тишли планка ва дека орасидаги тирқиш 36 мм дан 44 мм гача ўзгартирилиб тадқиқ этилганда, планка ва дека орасидаги тирқиш 36, 38 ва 40 мм бўлганда, сўта қобикларининг тўлиқ титилиши, мос равишда, 99,8, 99,3 ва 97,2 фоиз бўлди, янчилган донларнинг миқдори эса 97,0 фоиздан 83,4 фоизга камайди, донларнинг шикастланиши 3,1 фоиздан 1,5 фоизга камайиши аниқланди. Аммо, тирқиш 42 ва 44 мм бўлганда, қобикларнинг титилиши, мос равишда, 96,8 ва 96,2 фоизга, донларнинг янчилиши хар бир ўзгаришда 50,8 ва 24,2 фоизга тушиши кузатилди, донларнинг шикастланиш эса рўй бермади (1-жадвал).

Юқорида келтириб ўтилган тажриба усулидан фойдаланиб, қия тишли планка ҳам тадқиқ этилди. Бунда планка ва дека орасидаги тирқиш 36 мм дан 44 мм гача бўлган оралиқда ўзгартирилганда, тирқишнинг 36 мм ўлчамида сўта қобикларининг титилиш даражаси 100 фоиз, 38 мм ўлчамида эса бироз камайиб 99,6 фоизни ташкил этиши аниқланди.

1-жадвал Сидирадиган планка иш юзаси турининг қобикларни титилиш зонасидаги иш сифат кўрсаткичларига таъсири

Иш сифат кўрсаткичлари	Барабан декаси ва планкалар орасидаги тирқиш, мм														
	Тўғри тишли					Қия тишли					Рифелли				
	36	38	40	42	44	36	38	40	42	44	36	38	40	42	44
Қобикларнинг титилиши, %	99,8	99,3	97,2	96,8	96,2	100	99,6	98,3	97,8	96,7	100	100	99,4	98,7	98,0

Янчилган дон, %	97,0	92,4	83,4	50,8	24,2	97,0	91,8	72,3	28,9	15,0	93,8	97,4	88,1	27,1	25,9
Дон синиши, %	3,1	2,2	1,5	0	0	2,8	0	0	0	0	7,7	2,6	0	0	0

Ушбу ҳолатларда янчилган доннинг миқдори, мос равишда, 97,0 ва 91,8 фоизни ташкил этди. Донларнинг шикастланиши эса тирқиш 36 мм ростланганда 2,8 фоизни ташкил этган бўлса, тирқиш 38 мм ва ундан кейин 40, 42 ва 44 мм бўлганда умуман кузатилмади.

Қия тишли планка ва дека орасидаги тирқиш 40 мм, 42 мм ва 44 мм ораликда ростланганда, қобикларнинг титилиши камайиб бориб, мос равишда, 98,3 фоиз, 97, 8 фоиз ва 96,7 фоизга тенг бўлган бўлса, донларнинг янчилиши худди шу ростланишларда 72,3, 28,9 ва 15,0 фоизни ташкил этди.

Рифелли планка ва дека орасидаги тирқиш 36 мм дан 44 мм гача ўзгартирилиб тадқиқ этилганда, планка ва дека орасидаги тирқиш 36 ва 38 мм бўлганда, сўта қобиклари тўлиқ титилиши, донларнинг янчилиши 93,8 фоиздан 97,4 фоизга ортиши, шикастланиши эса 7,7 фоиздан 2,6 фоизга камайиши аниқланди. Аммо, тирқиш 40, 42 ва 44 мм бўлганда, қобикларнинг титилиши 98,0 фоизга, донларнинг янчилиши 25,9 фоизга тушиши кузатилди, донларнинг шикастланиш эса рўй бермади.

Олинган натижаларнинг таҳлили шуни кўрсатадики, тўғри тишли ва рифелли планкаларда сўта қобикларини титиш ва донларни янчиб, ажратиш қобилияти қия тишли сидирадиган планкаларга нисбатан юқори бўлсада, уларда донларнинг шикастланиши қия тишли планкага нисбатан кўпроқни ташкил этади. Қия тишли сидирадиган планка ва дека орасидаги тирқиш 38-40 мм бўлганда сўталарнинг қобиклари яхши титилишига, донларнинг нисбатан яхши янчилишига ва энг асосийси донларни умуман шикастланмаслигига эришилди.

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*Ачилов Ш.Ш.
Ўзбекистон давлат жаҳон тиллари университети
Испан тили амалий фанлар кафедраси ўқитувчиси*

ИСПАН ТИЛИ ЛЕКСИКАСИДА ЯНГИ СЎЗЛАР ЯСАЛИШИ ВА МАЪНО ХОСИЛ БЎЛИШИДА ЛИНГВИСТИК ЭЛЕМЕНЛАРНИНГ ТРАНСПОЗИЦИОН ҲУСУСИЯТЛАРИ

Аннотация. Ушбу мақолада чет тилларни ўқитишда коммуникатив компетенция ва лексик компетенцияни шакллантириш, ривожлантириш ҳамда такомиллаштиришнинг муҳим аҳамиятлари хақида ва коммуникатив компетенциянинг амалий ва назарий муаммолари хақида сўз юритилади.

Калит сўзлар: лексик компетенция, коммуникатив компетенция, компетентлик, лексика, сўз ясалиши, лингвистик элементлар, лексик бирлик, лингвистик лугат.

*Achilov Sh.Sh.
teacher
Department of Applied Spanish Language
Uzbekistan State University of World Languages*

TRANSPOSITION CHARACTERISTICS OF LINGUISTIC ELEMENTS IN THE FORMATION OF NEW WORDS AND MEANING IN THE SPANISH LEXICON

Abstract. This article talks about the importance of the formation, development and improvement of communicative competence and lexical competence in teaching new languages, also practical and theoretical problems of communicative competence.

Key words: Lexical competence, communicative competence, competence, vocabulary, word formation, language elements, lexical unit, linguistic dictionary.

Хар қандай тилни ўргатиш ва ўрганишда лексик компетенцияни шакллантириш жараёни катта қизиқиш ҳамда аҳамият касб этиб қўшимча изланишларни талаб қилади, чунки профессор Павлованинг сўзи билан айтганда "айнан лексик захирани бойитиш, ривожлантириш ва такомиллаштириш тингловчиларнинг чет тилини билиш малакаларининг барча босқичларида асос бўлиб хизмат қилади"¹²³

123 Павлова, Л.П. Формирование иноязычной лексической компетенции у студентов экономического вуза / Л.П. Павлова // Инновационные образовательные технологии. – 2011. – №2. – С. 44-50.

Ишимизнинг коммуникатив компетенциянинг таркибий қисми сифатида лексик компетенция борасида фикр ва мулохазалар билан давом эттирамиз.

Э.Г.Азимовнинг таъкидлашича, **Лексик компетенция** ўзлаштирилган тил белгилари билан кўп сонли гаплар ва уларнинг бирикмаларини тушунишни ва ифода қилишни англатади. Бу ўрганилаётган тилнинг фонетик, морфемик, лексик, синтактик қатламлари тўғрисида ахборотга эга бўлишни назарда тутади.¹²⁴ Яни талаба тилнинг тизими ҳамда элементлари ҳақида етарлича билимга эга бўлса лексик компетенцияни яхши эгаллайди. Шунингдек, **Лексик компетенция** деганда икки тилдаги лексик билимларни ҳажмини таққослай олиш, сўз маъносининг тузилишини аниқлай олиш ва сўздаги миллий маънони англай олиш ва лексик билимлар, малакалар, кўникмаларга асосланган билимлар назарда тутилади.¹²⁵ Шунингдек Е.Н.Соловованинг фикрича “Лексик компетенция бу лексик элементларни ўзида жамлаган тилнинг луғат таркибини билиш ва уни нутқда ишлата олиш қобилиятидир, лексик элементлар деганда сўз бирикмалари, турғун сўз бирикмалари (фразали иборали феъллар), сўз ясовчи лингвистик элементлар (кўшимчалар), мураккаб предлоглар назарда тутилади.¹²⁶ Лексик компетенцияни етарли даражада ўзлаштириш нутқ фаолиятининг барча турларида ижобий самара беради. Айнан шунинг учун ҳам Чет тилини ўргатишда асосий эътибор асосан лексикага қаратилади. **Лексик компетенция** продуктив ва рецептив турдаги лексик малакаларни такомиллаштириш асносида шакилланади, ривожланади ҳамда такомиллашади.

Бизнинг назаримизда испан тили лексикасини нутқда ишлатишда транспозиция жараёнини тавсифловчи ҳамда функционаллик хусусиятига эга лингвистик элементлар (аффикслар) ни билиш алоҳида аҳамият касб этади бинобарин лексикани ўргатиш бу сўз ишлата олишни эгаллашдир. Сўзни ишлатиш бу фақатгина сўзларни билишни эмас балки улардан ўз нутқида фойдалана олиш ва бошқаларнинг ҳам нутқида уни тушуна олишни талаб қилади. Бизнинг вазифамиз лексикани талабаларнинг хотирасида узок вақтга қолишини, зарур пайтда улардан фойдалана олишни, сўзни нутқ фаолиятига тўғри кирита олишни таъминлашдир.

Олийгоҳлардан бакалавр талабалар ўқув соатлари ва режаларидан келиб чиққан ҳолда чет тилини билиши учун маълум бир сондаги сўз билишлари керак. Шунинг учун лексикани танлаш мураккаб илмий жараён ҳисобланади ва танлашнинг самарали усуллари талаб қилади. Лексик материал ҳажми учун аниқ талаблар мавжуд. Олий ўқув юрти дастурига

124 Новый словарь методических терминов и понятий (теория и практика обучения языкам).- М.: Издательство ИКАРЮ.Э.Г.Азимов, А.Н.Щукин.2009.

125 Фомина Т.Д. Методика отбора английской лексики для средней общеобразовательной школы: автореф. дисс. ... канд. пед. наук 13.00.02/Т.Д. Фомина. - М., 1991. - 210 с.

126 Соловова Е.Н. Методика обучения иностранным языкам: базовый курс лекций: Пособие для студентов пед. вузов и учителей / 2-е изд. - М.: Просвещение, 2003. - 145 с.

мувофиқ фаол лексик минимум ўқишнинг бошидан охиригача маълум бир сондаги лексик бирликни ташкил этади. Мана шу миқдор CEFR талабларига (B2,C1) мос келади ва чет тилда эркин мулоқот қилиш имконини беради. Шундай қилиб бир лексик бирликни ўзлаштириш бир неча бўлимлардан ташкил топади:

- а) эшитганда лексик бирликни тушуниш ва уни талаффуз эта олиш,
- б) лексик бирликни ёзув шаклини билиш ва уни ёза олиш,
- в) лексик бирликни морфологиясини тўғри ифодалай билиш,
- г) лексик бирликни бир неча маъноларини билиш ва контекстга мослаб тўғри ишлата олиш,
- д) грамматик категориясини билиш,
- е) лексик бирликни синтактик туза олишини билиш,
- з) лексик бирликларни бирикмаларда ишлата олиш,
- и) тез-тез ишлатилиш соҳасини билиш,
- к) лексик бирлик қандай маданий ахборотни етказа олаётганлигини билиш,
- л) бошқа тилларда унинг эквивалентларини билиш.

Хулоса қиладиган бўлсак бу руйхат **Лексик компетенциянинг** асосий тамойилларини ўз ичига олади. Virginia De, Alba Quiñonesлар **Лексик компетенцияга** “el conocimiento del vocabulario de una lengua y la capacidad para utilizarlo” (2002:108)¹²⁷ дея таъриф берадилар. Хулоса қилиб айтадиган бўлсак **Лексик компетенцияни** ўргатишда лингвистик луғатларнинг асосий турлари, улардаги сўзнинг маъно тузулиши, тилнинг актив ва пасив лексикаси, янги ўзлаштирилган сўзлар идиомаларнинг таржимаси, янги сўзлар ясалиши ва маъно хосил бўлишида лингвистик элеменларнинг транспозицион, функционал, мутацион, хусусиятлари ва бошқа жиҳатлар жуда муҳим ҳисобланади.

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Бадалов У.Б., PhD

исследователь

Туйчиев Ш.А.

студент

Самаркандский государственный

университет имени Шарофа Рашидова

Ургутский филиал

Республика Узбекистан

ВОПРОСЫ ЭФФЕКТИВНОГО ИСПОЛЬЗОВАНИЯ ТРАНСГРАНИЧНЫХ РЕКРЕАЦИОННО-ТУРИСТСКИХ РЕСУРСОВ СРЕДНЕЙ АЗИИ

Аннотация. В данной статье анализируются природные, экономические и историко-культурные предпосылки развития в Средней Азии трансграничной индустрии отдыха и туризма. При этом выделяются ключевые рекреационно-ресурсные регионы трансграничного характера. Показаны преимущества, которые способно обеспечить развитие отдыха и туризма на межгосударственной основе, вместе с тем, обозначены ключевые проблемы, решение которых имеет определяющее значение для интенсификации трансграничного туризма в Средней Азии.

Ключевые слова: экскурсия, туристический объект, минеральные воды, рекреационный объект, экзотика, дома отдыха и санатории.

Badalov U.B., PhD

researcher

Tuychiev Sh.A.

student

Samarkand State University named after Sharof Rashidov

Urgut branch

The Republic of Uzbekistan

ISSUES OF EFFECTIVE USE OF CROSS-BOUNDARY RECREATIONAL AND TOURIST RESOURCES OF CENTRAL ASIA

Annotation. This article analyzes the natural, economic, historical and cultural prerequisites for the development of the cross-border recreation and tourism industry in Central Asia. At the same time, key recreational and resource regions of a transboundary nature are identified. The advantages that the development of recreation and tourism on an interstate basis can provide are shown, at the same time, key problems are identified, the solution of which is of

decisive importance for the intensification of cross-border tourism in Central Asia.

Key words: travelling, excursion object, mineral water, recreation object, exotic, health resorts and sanatoriums.

Введение. В последние годы расширились рамки географических исследований, ведутся научные исследования по проблемам социальных направлений, таких как медицинская география, рекреационная география, география туризма. Географические исследования в этом направлении важны, поскольку направлены на решение актуальных сегодня социальных проблем [7].

В условиях перехода стран Средней Азии на рыночные отношения, качественного преобразования структуры их национальных экономик, на пути к обретению ими достойного места в системе мирохозяйственных связей большое значение имеет интенсификация рекреации и туризма в регионе [5]. Важной же особенностью рекреационно-географического потенциала Среднеазиатского региона является наличие многообразных трансграничных ресурсов отдыха и туризма.

Основная часть. В числе основных ресурсно-инфраструктурных предпосылок развития трансграничной индустрии рекреации и туризма в пределах исследуемой территории считаем обоснованным выделить следующие географические факторы.

1. Наличие крупных природно-географических целостностей трансграничного характера, в частности, межгорных котловин, речных долин и бассейнов, дельтовых равнин, обладающих ярко выраженными чертами ландшафтного разнообразия и внутреннего естественноисторического единства территориальной организации [6].

2. Пространственная упорядоченная совокупность сопряжённых друг с другом типов регионального природопользования и культурных ландшафтов – зон пустынно-пастбищного животноводства, орошаемого и богарного земледелия, горно-пастбищного животноводства – в пределах трансграничных природно-хозяйственных геокомплексов.

3. Большое число археологических, историко-культурных и религиозных памятников на соседствующих территориях стран региона, посещение которых способно создать более полное представление о богатстве многовековой истории народов Средней Азии, чем знакомство с соответствующими достопримечательностями в пределах какого-либо одного государства.

4. Пестрота и, одновременно, сложное историко-региональное единство материальных и духовных культур родственных этносов Средней Азии, что предопределяет её богатство трансграничными ресурсами развития этнокультурного туризма.

5. Немаловажной предпосылкой интенсификации внутри региональных трансграничных туристских потоков является наличие многочисленных деловых, семейных других контактов личного характера среди населения сопредельных государств региона [2]. Эти обстоятельства могут считаться потенциально весьма мощным двигателем развития соответствующих разновидностей трансграничного туризма в Средней Азии.

6. Анализируемая территория располагает разветвлённой системой международных путей сообщений, связывающих пограничные страны и их отдельные регионы, что создаёт хорошие инфраструктурные предпосылки для становления трансграничной рекреационно-туристской индустрии.

С учётом вышеназванных факторов, нам представляется, что целостные трансграничные географические образования Средней Азии насыщены рекреационно-туристскими ресурсами, более интересны и аттрактивны в данном отношении по сравнению с их отдельными частями, расположенными в пределах отдельных государств региона [1].

Включая, в качестве двух крупнейших трансграничных рекреационно-туристских регионов Средней Азии мы рассматриваем, долину Зарафшана и дельту низовья Амударьи, обладающих значительными по величине и разнообразными по структуре ресурсами отдыха и туризма.

Долина Зарафшана расположена в центральной части Туранской природно-географической провинции Средней Азии. Она состоит из трёх крупных тектонических и ландшафтно-географических подразделений – верхней долины, административно находящейся в Согдийской области Таджикистана, средней долины, охватывающая сопредельные территории Самаркандской и Навоийской областей Узбекистана, и низовьев (Бухарской и Каракульский дельта), приходящихся, главным образом, на территорию Бухарской области Узбекистана. Каждая из этих региональных структур обладает крупным и своеобразным рекреационно-туристским потенциалом, как естественного, так и историко-культурного характера. На наш взгляд, соединение соответствующих возможностей этих районов в рамках единого территориального рекреационно-туристского комплекса поднимает аттрактивность Зеравшанского бассейна на качественно иной уровень [8].

Практически всё пространство рассматриваемой территории, за исключением, разве что, самых верховий реки, обладает богатой и неповторимой историей, являясь одной из колыбелей цивилизации Среднеазиатских народов. Нам представляется необходимым разработать специальную туристскую программу, способную отразить соответствующий историко-культурный потенциал Зарафшанского пояса. Туристский маршрут, охватывающий исторические и современные города региона, при этом следует протянуть от Пенджикента до Каракуля и Алата, непременно включив в него Ургут, Самарканд, Пайарык, Челек,

Каттакурган, Навои, Гиждуван, Бухару. Такое турне отразит богатое культурное наследие Зеравшанского бассейна во всём его географическом и историческом (согдийская культура, памятники эпох Саманидов, Тимуридов, различных династий бухарских правителей) многообразии. Своеобразные впечатления у путешественников, безусловно, способно составить разнообразие архитектурного и инженерного облика городов, материальных и духовных традиций населения в связи с дифференциацией природной организации территории [9].

Целесообразным представляется в рамках единой программы путешествия сочетать изучение историко-культурных достопримечательностей с посещением привлекательных в ландшафтно-экологическом и рекреационно-эстетическом плане географических объектов, которыми весьма насыщена характеризуемая территория, особенно верховья реки в пределах Республики Таджикистан (долина Матчи, озеро Искандеркуль и т.п.).

Значительны в описываемом регионе и ресурсы развития лечебного туризма. Достаточно назвать в этой связи родники и целебные источники окрестностей Аманкутана в Самаркандской области, санаторий Ситораи-Мохи-Хоса в Бухарской области, обладающий уникальными климатобальнеологическими условиями для лечения заболеваний почек, чтобы создать представление о разнообразном потенциале соответствующего класса рекреационно-туристских ресурсов Зеравшанского бассейна.

Наконец, Зеравшанский бассейн располагает многочисленными культурными объектами, почитаемыми в качестве религиозных святынь, например, медресе и мечети Самарканда, Бухары, Гиждувана, Пенджикента и, конечно же, мавзолеем одного из величайших в истории собирателей хадисов, выдающегося теолога Имама аль-Бухары в городе Челеке Самаркандской области.

Большим богатством многообразных рекреационно-туристских ресурсов располагает ещё одна крупная трансграничная территориальная система Средней Азии - Низовья Амударьи. Этот регион объединяет пространство современных и древних (Хорезмский и Сарыкамьшской) дельт Амударьи в административных границах Республики Каракалпакстан, Хорезмской области Узбекистана и Дашогузской области Туркменистана. Он, так же, как и рассмотренные выше ареалы, обладает привлекательностью для туристов с самых разных позиций – ландшафтно-географических, историко-архитектурных, этнокультурных, экологических.

Дельтовая равнина Амударьи представляет собой целостное естественно-географическое образование, характеризующееся определённым образом упорядоченной внутренней дифференциацией геоэкосистем, образуя весьма интересный с точки зрения экотуризма объект. Специфику экотуристическим свойствам данного региона придаёт

сложная геоэкологическая обстановка, сложившаяся вследствие нерациональности природопользования, как на локальном, так и на регионально-бассейновом уровне. При этом знакомство путешественников с этими особенностями Низовьев Амударьи может иметь большое просветительское и гуманитарное значение. С учётом этого экотуристские маршруты видится возможным и разумным использовать для привлечения инвестиций в экономику этого экологически неблагоприятного региона, в частности, путём создания специальных экскурсионных зон и ареалов как сфер приложения труда и повышения занятости местного населения.

Вместе с тем, пространственная близость таких историко-культурных центров, как Хива, Ургенч, Беруни, Турткуль, Дашогуз и других городов и сельских поселений определяет насыщенность Нижнеамударьинского региона историческими достопримечательностями, также имеющими значительную привлекательность для туристов. На территории всего рассматриваемого региона находится множество археологических памятников, которые также могут считаться объектами трансграничного туризма. Наконец, соседство и взаимодействие материальных и духовные культур этнотерриториальных групп узбекского, каракалпакского и туркменского народов, помимо прочих атрибутов рассматриваемого региона, определяет его рекреационно-туристскую аттрактивность.

В целом всю Среднюю Азию можно рассматривать как единую макро территориальную рекреационно-туристскую целостность, обозначенные же выше региональные геокомплексы при таком подходе выступают в качестве звеньев её опорного рекреационно-туристского каркаса.

Заключение. На основании вышеизложенного можно сказать, что в нашей стране, помимо использования возможностей рекреационно-туристских ресурсов, а также определения основных задач по их развитию, в области рационального использования рекреационно-туристских ресурсов регионов, знакомя иностранных туристов не только с ландшафтом, богатой и уникальной природой нашей Родины, но и народы, призвана связать узы дружбы между собой.

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*Бакиева И.А., к.э.н.
доцент
кафедра “Управление человеческими ресурсами”
ТГЭУ*

ОРГАНИЗАЦИЯ ПРОФЕССИОНАЛЬНОЙ ПОДГОТОВКИ БЕЗРАБОТНЫХ ГРАЖДАН В УЗБЕКИСТАНЕ

Аннотация. В данной статье рассматриваются влияние глобальных изменений на рынок труда и уровень безработицы, теоретически исследованы вопросы обучения безработных современным профессиям, проанализированы уровень безработицы в республике, изучены меры профессиональной подготовки и трудоустройства безработных.

Ключевые слова: Рынок труда, безработица, обучение, профессиональная подготовка, конкурентоспособность, занятость, трудоустройство.

*Bakieva I.A., Ph.D.
associate professor
Department of “Human Resource Management”
TSEU*

ORGANIZATION OF VOCATIONAL TRAINING FOR UNEMPLOYED CITIZENS IN UZBEKISTAN

Abstract. This article examines the impact of global changes on the labor market and unemployment rates. The issues of training the unemployed in modern professions were theoretically studied, the unemployment rate in the republic was analyzed, and measures of vocational training and employment of the unemployed were studied.

Key words: Labor market, unemployment, education, vocational training, competitiveness, employment.

Введение

Одним из наиболее эффективных направлений работы по снижению напряженности на рынке труда и обеспечению социально-экономической стабильности в регионах является переподготовка безработного населения при государственной поддержке и повышение их конкурентоспособности на основе организации дополнительного современного профессионального образования.

Обзор литературы.

В зарубежной и отечественной науке и практике накоплен богатый теоретический потенциал и большой практический опыт реализации различных мер по снижению безработицы.

По утверждению академика Абдурахманова К.Х., безработица – как социально-экономическое явление – это отсутствие занятости в производстве товаров и услуг определенной экономически активной части населения, способной и желающей работать [3].

Методология исследования

В научных исследованиях использовались различные научные методы изучения экономической реальности и процессов: диалектический подход к анализу экономических систем, сравнительный и систематический анализ, базовые расчеты и методы статистической группировки. В качестве информационной базы использованы данные Государственного агентства по статистике при Президенте Республики Узбекистан, Министерства занятости и сокращения бедности Республики Узбекистан, а также материалы Интернет-сайтов ряда средств массовой информации.

Результаты анализа

Причина столь резкого роста уровня безработицы связана с совершенствованием нормативно правовых подходов к определению уровня безработицы и тем, что расчеты производятся на основе требований международных стандартов. Однако стоит отметить, что уровень безработицы за последние 5 лет был намного выше естественного уровня. Конечно, наблюдается относительное снижение данного показателя в 2022 году, но следует отметить, что данная проблема по-прежнему наносит определенный ущерб экономике республики. Если рассматривать регионы, то самый высокий показатель – 9,3% зафиксирован в Бухарской, Джизакской, Самаркандской, Сырдарьинской и Сурхандарьинской областях [5].

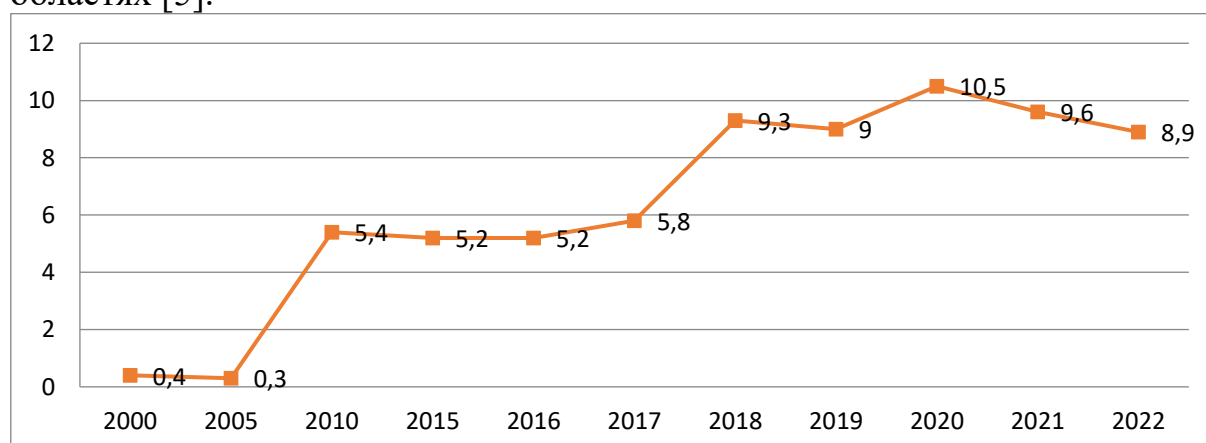


Рис. 1. Динамика уровня безработицы в Республике Узбекистан, %

Источник: Составлено автором по данным Агентства по статистике при Президенте Республики Узбекистан. (www.stat.uz)

В республике обучение и переподготовка безработных

осуществляется в государственных Моноцентрах „Ишга мархамат“ (Добропожаловать на работу) и в центрах профессионального обучения при министерстве Занятости и сокращения бедности Республики Узбекистан.

Профессиональная подготовка безработных граждан и незанятого населения включает в себя следующие виды обучения:

профессиональное образование с целью быстрого приобретения навыков, необходимых обучающимся для выполнения конкретной работы или группы работ;

обучение работников в целях обновления знаний, навыков и квалификации, повышения их профессионального мастерства и повышения конкурентоспособности по действующей профессии, а также изучения новой техники, технологий и других навыков, связанных с профилем профессиональной деятельности.

Таким образом, с помощью местных органов труда республики реализуются мероприятия по координации спроса и предложения на рынке труда, по подготовке безработных граждан к различным современным профессиям, а также по их трудоустройству (рис. 2).

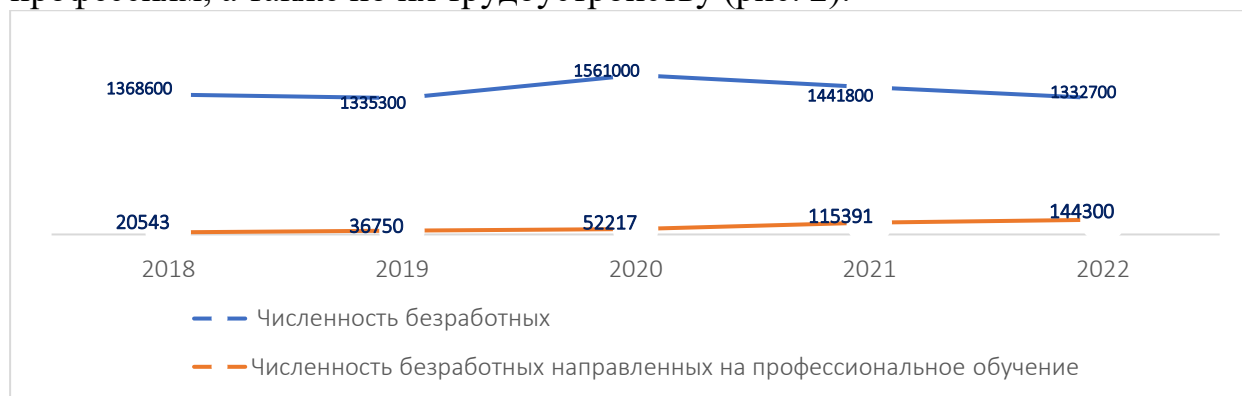


Рис. 2. Численность безработных и направленных на профессиональное обучение в Республике Узбекистан

Источник: авторская разработка на основе данных Агентства по статистике при Президенте Республики Узбекистан и Министерства занятости и сокращения бедности Республики Узбекистан.

Как видно из приведенных данных, численность безработных имеет тенденцию к изменению в 2018-2022 годах. В 2019 году количество безработных в республике сократилось на 33,3 тыс. человек (2,49 %), однако ситуация с пандемией COVID-19 оказала негативное воздействие на рынок труда и в 2020 году по сравнению с 2019 годом численность безработных увеличилось на 225,7 тыс. человек (14,45 %). В 2021-2022 годах количество безработных сократилось на 8,27% и 8,19% соответственно. В 2022 году общая численность безработных в стране достиг 1332700 человек. Так же, на анализируемый период динамика численности лиц, направленных на профессиональное обучение, имела тенденцию к росту.

Конечно, перед гражданами, обучающимися современным профессиям, стоит еще одна важная задача: найти работу и получать доход. Не всем подготовленным безработным и частично занятым гражданам это удаётся. Потому что имеют место еще и показатели конкурентоспособности на рынке труда (рисунок 3).



Рис. 3. Численность направленных на профессиональное обучение и трудоустроенных безработных в Республике Узбекистан, чел.

Источник: авторская разработка на основе данных Министерства занятости и сокращения бедности Республики Узбекистан.

Выводы

В процессе исследования изучаемой проблемы установлено, что численность нуждающихся в трудоустройстве в республике все еще достаточно велико. При подготовке безработных к современным профессиям необходимо изучить требования работодателей и усовершенствовать деятельность моноцентра «Ишга Мархамат» исходя из потребностей работодателей, реформировать программы обучения центров профессионального обучения, реформирование учебных программ региональных центров профессионального обучения, подведомственных.

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Баратов Л.С.
“Энергетика” кафедраси ассистенти
Жиззах политехника институти

ЭЛЕКТР ЭНЕРГИЯСИ ПАРАМЕТРЛАРИНИНГ ЭЛЕКТРОМАГНИТ ЎЗГАРТГИЧЛАРИ

Аннотация. Электромеханик ўзгартгичларнинг физик асоси – ўлчанаётган тўқнинг ёрдамчи магнит майдонлари ёки ферромагнит массалар билан куч ўзаро таъсирига асосланган. Улар конструкциясининг соддалиги, юқори ишончлилик, мутлақ автономлик, кўп чегаралиликни амалга ошириш, доимий, ўзгарувчан ва импульси тоқларни ўлчашишмконияти каби қатор афзалликларга эга. Шунинг учун ҳозирги вақтда 10 дан 5000 А гача тўқларда ишлайдиган саноат ЭМТЎларнинг кўпчилиги электромеханик ўлчаши механизми асосида тайёрланади.

Калит сўзлар: Тўқ трансформаторлари. Бир ва уч фазали бирламчи тўқларни тўрт элементли датчиклари.

Baratov L.S.
assistant
"Energy" department
Jizzakh Polytechnic Institute

ELECTROMAGNETIC CONVERTERS OF ELECTRICAL ENERGY PARAMETERS

Abstract. The physical basis of electromechanical transducers is based on the force interaction of the measured current with auxiliary magnetic fields or ferromagnetic masses. They have a number of advantages, such as the simplicity of their construction, high reliability, absolute autonomy, the implementation of multiple limits, the ability to measure direct, alternating and impulse currents. Therefore, most of the industrial EMTOs operating at currents from 10 to 5000 A are made on the basis of an electromechanical measuring mechanism.

Key words: Current transformers. Four-element sensors of single and three-phase primary currents.

Электр таъминоти тизимининг комбинациялаштирилган бошқарув тизимларида қўлланиладиган классик бирламчи тўқ ўзгартгичларининг ишлаш тамойилларини батафсилроқ таҳлил қиламиз.

Тўқ трансформаторлари. Ушбу тур датчик – тўқ трансформаторида учта ўзгартириш элементлари мавжуд: Ҳозирги вақтда классик тўқ ўзгартиргичлари иккиламчи ўрамлари чиқувчи тўқларининг энг кўп қўлланиладиган қийматлари – 1 ва 5 А.

Трансформаторларнинг номинал тўк (I_n), номинал кучланиш (U_n), истеъмолчининг юкмасига боғлиқ бўлган аниқлик даражасига қараб қабул қилинади ҳамда электродинамик ва термик турғунлигига ($K_{дин}$ ва K_T) кўра текширилиб кўрилади. Электродинамик чидамлик куйидаги шарт бажарилсагина содир бўлади:

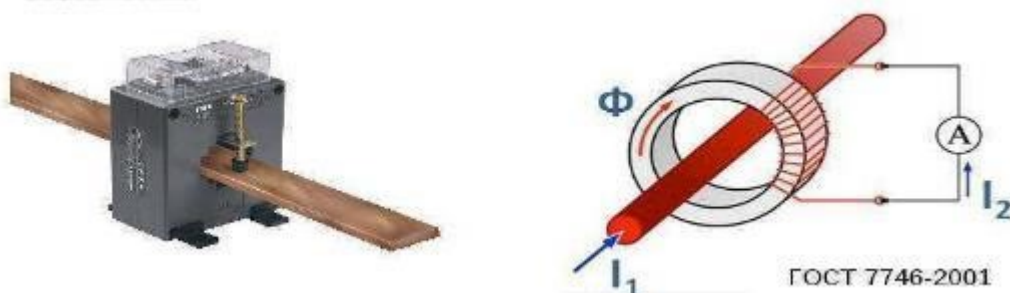
$$K_{дин} \geq \frac{i_y}{\sqrt{2} \cdot I_{H1}} \quad \text{еки} \quad K_{дин} \cdot \sqrt{2} \cdot I_{H1} \geq i_y,$$

бу ерда $K_{дин}$ - Трансформаторлари учун каталогларда келтирилган бўлади;

I_n -тўк трансформаторининг (ўлчов трансформаторлари) бирламчи чулғамининг номинал токи. Тўк трансформаторларининг термик бардошлик қарралиги каталогларда бир дақиқа давомийлик учун берилади

$$K_t \geq \frac{I_k \cdot \sqrt{t_k}}{I_{H1}} \quad \text{еки} \quad (I_{H1} \cdot K_t)^2 \geq I_k^2 \cdot t_k,$$

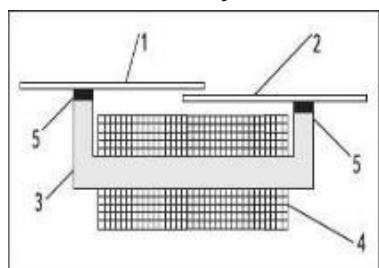
Электр таъминоти тизими тўқлари ва қувватини бошқариш замонавий электрон ва микропроцессорли қурилмалари талабларини қониқтирмайди. Чунки бунда юкламанинг электр қуввати бир неча юз вольт-амперга етади, бу электр таъминоти тизимиа қўшимча мос элементлар ва қурилмалар чиқишига оралиқ ўзгартирувчи трансформаторлар сифатида уланиш заруратини талаб этади.



2-расм. Классик тўк трансформатори. 1 – магнит ўзак, 2 - иккиламчи чулғам - w_2 , 3 –бирламчи ток ўтказгич-бирламчи чулғам - w_1 .

Бир ва уч фазали бирламчи тўқларни тўрт элементли датчиклари. Профессор В. Коваленков яратган бир фазали тўрт элементли магнит бошқарилувчи контактининг-датчиги (геркон) асосий элементлари 3 – расмда келтирилган. Бир фазали тўрт элементли бирламчи ток датчигида 4 - тўк ўтказгич - бирламчи чулғамдан тўк оқиб ўтганда 1 – қўзғалувчи контакт

2 – қўзғалмас контактга уланади, тўк оқиши тўхтаганда 1 – контакт 2 - контактдан узилади.



3-расм. Профессор В. Коваленковнинг магнит бошқарилувчи контактнинг асосий элементлари: 1-қўзғалмас контакт, 2-қўзғалувчан контакт, 3-магнит ўзак, 4-тўк ўтказгич - бирламчи чулғам, 5-изоляция.

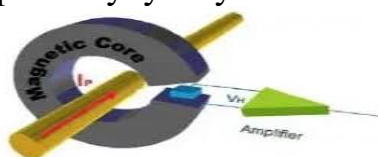
Геркон кўринишидаги тўрт элементли датчикда ёрдамчи – изоляцияловчи материал сифатида 5- изоляциядан фойдаланилади.

Тўкнинг ўзгариши аниқлигига, тўк ўзгартиргичлар синфи талабларига келсак, улар жуда хилма-хил. Ўзгаришлар хатоликлари 0,1...0,5 % дан ошмаслиги керак, масалан, электр энергия истеъмолини ҳисобга олиш ва назорат қилишда, электр таъминоти тизими электр қурилмалари синовларида. Электр таъминоти тизимлари электр қурилмалари тезкор назорати ва ҳимоясида электр автоматика элементлари ва қурилмалари аниқлиги жуда юқори бўлиши зарур.

Уч фазали тўклар ўзгартиргичлари юклама кирувчи сигнали қаршилигининг ўзгаришида амплитудали ва бурчакли хатоликлари кичик бўлиши; ишончли бўлиши, вақт ва ташқи таъсирлар асосий характеристикаси стабиллигини таъминлаши, тез ишлашига амал қилиши керак.

Honeywell компаниясининг ўзгартиргичлари – тўк датчиклари.

1-жадвалда машҳур Honeywell компаниясининг энг кўп қўлланиладиган ўзгартиргичлари – тўк датчиклари берилган бўлиб, улар доимий, ўзгарувчан, импульсли тоқларни ўлчаш ва назорат қилишга ва тескари алоқа тизимини яратиш учун мўлжалланган.



Холл эффекти асосидаги датчиклар ва электромагнитли ТТлар 1-жадвалда кўриниб турганидек, Honeywell компаниясининг резистив ўзгартиргичлари – тўк датчиклари таркибида резистив элемент мавжуд ва у ўлчанаётган занжирга киритилган. Холл эффектига асосланган ўзгартиргичлар магнит тизими тўйинганлиги сабабли катта тоқларни ўлчашда юқори аниқликка эга, аниқлиги чекланган, нархи баланд, қўшимча қувват манбаларини талаб қилади.

Honeywell компанияси тўқ ўзгартиргичларининг техник
характеристикалари

Асосий кўрсаткичлар	Резистив ўзгартиргичлар	Холл д-ўзгартиргич	Электромагнит ТТ
Аниқлик	0,02–0,5	0,02–0,5	0,2–1
Ностабил хароратда аниқлик	0,12–1	0,2–1	0,5–3
Катта тўқларни ўлчаш, кА	0.1 гача	20 гача	200 гача
Тўқ ва кучланиш орасидаги силжиш	До 20° гача	0°	0°
Изоляция, Мом	0	1000	1000
Манбаига уланиш	Контактли	Контактсиз	Контактсиз
АС/ДС ўлчаш	АС/ДС	АС/ДС	Фақат АС
Нархи	Паст	Баланд	Ўрта
Истеъмол қуввати, ВА	75	5	1

Шундай қилиб, тўқ ўзгартгичларининг кўплаб турлари мавжуд бўлсада, лекин электр таъминоти тизимида назорат ва бошқарувда ўзгартгичларининг оптимал турини танлаш, уларнинг афзалликлари ва камчиликларини кўриб чиқиш, уларни янги туркумларини ишлаб чиқиш талаб этилади.

Электромагнит тўқ ўзгартгичлар тузилмаларининг дастлабки таҳлили ва уларнинг келтирилган имкониятларини нисбий баҳолаш шуни кўрсатдики, электр энергетика тизимида реактив қувватни бошқариш учун тузилма ва уни тайёрлаш технологиясининг оддийлиги, юқори ишончлилиги ва тежамкорлиги туфайли тўла ток қийматини кучланиш кўринишдаги чиқиш сигналига ўзгартирадиган КФИЭМТЎ (кенгайтирилган функционал имкониятли електромагнит токни кучланишга ўзгартгичлар) энг истиқболли ҳисобланади.

Фойдаланилган адабиётлар рўйхати:

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*Бердиев А.Х., кандидат экономических наук
доцент
Каршинский инженерно-экономический институт
Узбекистан
Расулов Х.К.
старший преподаватель
Каршинский инженерно-экономический институт
Узбекистан*

ПЕРСПЕКТИВЫ РАЗВИТИЯ АГРОКЛАСТЕРОВ

Аннотация. В результате либерализации экономики и развития науки и техники в нашей стране в аграрном секторе, как и во всех других отраслях, происходят фундаментальные изменения. Развитие этой сферы рассматривается как важный приоритет государства и общества. Основная причина этого в том, что аграрный сектор является основным сектором, решающим продовольственные проблемы страны и снабжающим предприятия пищевой промышленности сырьем

Ключевые слова: агрокластер, рыночные отношения, аграрный сектор, эффективность в АПК, производство, услуга, стабильность, конкурентоспособный продукт, эффективность, экономическая эффективность

*Berdiev A., candidate of economic sciences
associate professor
Karshi Engineering and Economic Institute
Uzbekistan
Rasulov Kh.
senior lecturer
Karshi Engineering and Economic Institute
Uzbekistan*

PROSPECTS FOR THE DEVELOPMENT OF AGROCLUSTERS

Abstract. In our country, as a result of the development of the economy, science, and technology, changes are occurring in the agricultural sector, like in all other fields. Developing this sector is seen as a crucial strategic task for the state and society. The main reason for this is that the agricultural sector is considered a fundamental link that not only solves the country's food problems but also provides the food industry with raw materials.

Keywords: agrocluster, market relations, agricultural sector, profitability in agribusiness, production, services, sustainability, competitive products, profitability, economic sustainability.

В последние годы в нашей Республике уделяется большое внимание внедрению кластерной системы, которая доказала свою эффективность в международной практике и имеет важное значение для развития экономики и обеспечения её стабильности, а также для применения рыночных отношений и опыта на практике. Это не только способствует развитию экономики, но и увеличивает экспортный потенциал страны и обеспечивает производство конкурентоспособной качественной продукции.

В этом контексте, на совещании под председательством Президента Шавката Мирзиёева 12 декабря 2023 года было подчеркнуто, что необходимо развивать эту отрасль

В последние годы в нашей Республике уделяется большое внимание внедрению кластерной системы, которая доказала свою эффективность в международной практике и имеет важное значение для развития экономики и обеспечения её стабильности, а также для применения рыночных отношений и опыта на практике. Это не только способствует развитию экономики, но и увеличивает экспортный потенциал страны и обеспечивает производство конкурентоспособной качественной продукции.

В этом контексте, на совещании под председательством Президента Шавката Мирзиёева 12 декабря 2023 года было подчеркнуто, что необходимо развивать эту отрасль и важность её поддержки: «Мы должны всесторонне поддерживать деятельность кластеров. Будущее сельского хозяйства, его экономическая эффективность связаны с кластерами. Кластеры должны стать "локомотивом" стремительного развития аграрного сектора». Президент отметил, что развитие кластерной системы в сельском хозяйстве является приоритетным направлением на сегодняшний день.

Инициированная Президентом кластерная система имеет важное значение для развития агропромышленной интеграции и текстильной промышленности. Учитывая, что в мире лидирует экономика, ориентированная на производство готовой продукции, а не сырья, в нашей стране созданы все возможности для внедрения этого метода. В настоящее время решаются вопросы выделения земель для создаваемых предприятий, подготовки квалифицированных кадров, научно-технических инноваций в производстве. Важнейшим аспектом является повышение производительности, улучшение плодородия земли, а также организация агротехнической и биохимической обработки хлопка на основе научно-практического подхода.

В Республике Узбекистан кластерная система была внедрена в 2017 году. На основании Постановления Президента Республики Узбекистан №ПП-2978 от 19 мая 2017 года «О мерах по созданию современного хлопково-текстильного кластера в Бухарской области» в Бухарской области была создана ООО СП «VST cluster». Согласно Постановлению Президента №ПК-3279 от 15 сентября 2017 года «О мерах по созданию современного

хлопково-текстильного кластера в Сырдарьинской области» был образован ООО СП «Bek cluster» в Сырдарьинской области в качестве экспериментальных хлопково-текстильных кластеров. После того как кластерная система показала хорошие результаты, по всей стране были созданы различные кластеры. В настоящее время в республике функционируют хлопково-текстильные, зерновые и плодоовощные кластеры.

В последние годы, как и во всех других сферах, в сельском хозяйстве были намечены масштабные планы. Обеспечение развития в этой области служит удовлетворению непосредственных потребностей населения в продуктах питания, обеспечению промышленных предприятий сырьем и поддержанию их стабильной работы. Поэтому в течение следующих пяти лет перед субъектами аграрного сектора стоят основные задачи: увеличить урожайность минимум в 2 раза, углубить переработку сырья, довести экспорт сектора до 7 миллиардов долларов, повысить занятость и доходы населения.

Кластеры рассматриваются как ключевые и ведущие хозяйствующие субъекты, выступающие в качестве основных драйверов производства. Эта система за короткое время создала условия для значительных изменений. Например, в одной только хлопководческой отрасли переработка волокна увеличилась в 2,5 раза и достигла 100%. Производство пряжи увеличилось в 2 раза, производство готовой продукции — в 3 раза, а экспорт к концу 2022 года достиг 3 миллиардов долларов.

Было создано 125 новых предприятий общей стоимостью 2 миллиарда долларов, охватывающих этапы от переработки хлопкового сырья до производства готовой продукции, а также создано 150 тысяч постоянных рабочих мест. Кластеры ввели более 5000 высокопроизводительных машин, а на 126 тысячах гектаров были внедрены водосберегающие технологии.

В результате организации сельскохозяйственного производства на основе инновационных подходов урожайность продолжает расти. Многие кластеры в 2022 году достигли урожайности хлопка на уровне 35-40 центнеров с гектара.

Исходя из этих результатов, в нашей стране расширяются все возможности для повышения эффективности в сельском хозяйстве и агропромышленном комплексе посредством кластеров, которые получают поддержку от государства. В частности, на внедрение этой системы было направлено 10 триллионов сумов из бюджета, выделены финансовые гранты в размере 1 миллиона сумов на каждый гектар хлопковых полей для повышения плодородия почвы и урожайности, перехода на новые технологии орошения, защиты растений, создания современных лабораторий и обучения фермеров. Кластерам выделяются финансовые гранты на покупку оборудования для окрашивания тканей и производства смесовых тканей, а также 150 миллионов долларов для кредитования таких

проектов, с целью увеличения уровня переработки пряжи с нынешних 50% до 70% в течение следующих двух лет.

Кроме того, в нашей республике проводится ряд экономических реформ с целью поддержки деятельности зерновых, плодоовощных, животноводческих и других видов кластеров. В частности, предусматривается переход к рыночным отношениям в выращивании и продаже зерна, предоставление зерновым кластерам и фермерам права полностью свободно продавать пшеницу по рыночной цене, выделение кредитных ресурсов на один год под 10% из фонда оборотных средств для плодоовощных кластеров, а также страхование плодоовощной продукции от климатических рисков. В целях развития данной системы проводится конкурс среди страховых компаний, и государство покрывает 50% страховой премии для кластеров и фермеров, имеющих экспортные контракты.

В сельском хозяйстве создаются агрологистические центры на основе государственно-частного партнерства для обеспечения плодоовощных кластеров и перерабатывающих предприятий инфраструктурой. В целях поддержки фермеров и кластеров с следующего года государство компенсирует часть процентной ставки по кредитам на покупку техники, превышающей 10%. Кроме того, импортируемая техника, комплектующие и запчасти освобождаются от таможенных платежей на срок три года, что позволяет кластерам и фермерам приобретать технику на 35% дешевле.

Благодаря выполненным мероприятиям и последовательному проведению экономических реформ, в республике было создано 463 кластера, которым выделено 2210,4 тысячи гектаров земли, из которых 282,1 тысячи гектаров закреплены за кластерами, и 1931,0 тысячи гектаров распределены между 75283 фермерскими хозяйствами. Число плодоовощных кластеров составляет 245, с закрепленной за ними площадью в 179,2 тысячи гектаров.

В южном регионе нашей республики, в Кашкадарьинской области, также были предприняты позитивные шаги по налаживанию деятельности агрокластеров. Область является одним из крупнейших производителей сельскохозяйственной продукции в республике, и уделяется большое внимание созданию и поддержке агрокластеров в таких секторах, как хлопково-текстильный, зерновой, плодоовощной, животноводческий и других. Анализируя деятельность хлопково-текстильных агрокластеров, можно отметить, что в 2023 году в области функционировали 18 хлопково-текстильных кластеров с общей площадью выделенной земли в 136036 гектаров.

Таблица 1

**Информация о хлопково-текстильных кластерах, действующих в
Кашкадарьинской области в 2023 году**

Название района	Количество кластеров	Площадь хлопковых полей в 2023 году, га
По республике:	134	1 034 223
Кашкадарьинская область	18	136 036
Гузар	ООО «Kitobipyigiruv»	6 500
Карши	ООО «Qarshi agroklaster»	6 885
Карши	ООО «Claster Hilol»	3 136
Карши	ООО «Beshkent Agrocluster»	4 979
Косон	ООО «Koson baxt tekstel»	14 195
Косон	ООО «Bunyodkor»	7 505
Миришкор	ООО ЧП «Litai textile Overseas»	7 527
Миришкор	ООО ЧП «Orginal cotton Mirishkor»	2 565
Миришкор	ООО «Mirishkor tekstil group klaster»	9 058
Мубарек	ООО ЧП «EMG INTER INVESTMENT» (МТ «Amir Tex»)	5 100
Мубарек	ЧП «Shodlik»	2 000
Мубарек	ООО «Semurg Agro-Tex»	2 000
Касби	ООО «Nahshab tex group»	3 346
Касби	ООО «Cluster Hilol»	2 000
Касби	ООО «Kitobipyigiruv»	2 000
Касби	ООО «Indorama Agro»	11 140
Нишан		17 300
Чиракчи	ООО «Chiroqchi Klaster»	8 200
Камашы	ООО «Oqsaroy tekstil»	5 165
Камашы	ООО «Qamashi Textile»	3 835
г.Шахрисабз	ООО «Oqsaroy klaster»	200
Шахрисабз		4 100
Яккабаг		7 300

В стране осуществляются экономические реформы, направленные на интеграцию национальной экономики в мировую экономику и занимание соответствующего места в ней. Для этого существуют два основных условия: во-первых, реформы должны базироваться на принципах и механизмах, применяемых в мировом экономическом сообществе; во-вторых, при реализации реформ необходимо учитывать особенности развития национальной экономики, ее текущее состояние, национальную культуру и социальные особенности населения, а также другие факторы и условия, оказывающие влияние на формирование прогресса страны.

Таким образом, поддержка кластерной политики является одной из основных приоритетных задач нашей страны, обеспечивающей устойчивость населения, и следует подчеркнуть, что создание и функционирование агрокластеров в данном вопросе должно быть особенно внимательно рассмотрено. Например, в результате реализации экономических мероприятий в аграрной сфере в последние пять лет в Кашкадарьинской области было обеспечено трудоустройство 7872 человек благодаря развитию деятельности агрокластеров. Это также можно увидеть из данных, представленных в таблице 2, по районам, в которых функционируют кластеры.

Таблица 2

Информация о численности работников, занятых в хлопково-текстильных кластерах, действующих в Кашкадарьинской области

№	Название кластеров	Количество рабочих, (на человека)		
		2021	2022	2023
	ВСЕГО	7 212	8 159	7 872
1	ООО "Kitobipyigiruv"	521	225	103
2	ООО "Qarshi agroklastar"	469	871	318
3	ООО "CLUSTER KHILAL"	262	264	150
4	ООО "Beshkent agro Klaster"	26	42	42
5	ООО "Naxshab Tex Group"	14	39	127
6	ООО ЧП "INDORAMA AGRO"	349	1 514	2 051
7	ООО "Koson Baxt tekstil"	247	332	502
8	ООО "Bunyodkor"	540	674	706
9	ООО "Qamashi tekstil"	479	213	258
10	ООО "Oqsaroy tekstil"	1 824	1 824	1 756
11	ООО "Mirishkor tekstil group klaster"	596	543	370
12	Original Kotton Mirishkor	266	236	107
13	ООО "Sulton Golden Tex"	-	11	88
14	ООО "Mirishkor Ratex Tekstil"	1	1	35
15	ООО "EMG Inter Investment"	340	300	230
16	ООО "Semrug Agro-Tex"	1	16	49
17	ООО "Shodlik paxta don Klasteri"	-	11	88
18	ООО "Chirokchi klaster"	654	374	283

Выводы и предложения:

Наше мнение состоит в том, что в будущем следует рассматривать развитие этой системы как основное и важное направление в сельском хозяйстве. Вместе с этим, агрокластеры также должны реализовываться с учетом интересов государства и народа, и следующие шаги должны быть предприняты с учетом этого:

- Обновление агротехнических мероприятий путем привлечения инновационных технологий в процесс выращивания продукции, увеличение производства на несколько порядков, обеспечение устойчивого снабжения населения и производство конкурентоспособной продукции.

- Создание цепочки добавленной стоимости, позволяющей производителям сельхозпродукции направлять готовую продукцию на экспорт.

- Получение высокой прибыли при минимальных затратах. Создание системы обеспечения финансовой устойчивости и поддержки производителей сельхозпродукции.

- Улучшение материально-технической базы производителей сельхозпродукции и оборудование современными сельскохозяйственными технологиями и средствами. Улучшение инфраструктуры и повышение эффективности предоставляемых услуг.

В заключение следует отметить, что кластеры представляют собой новую форму конкурентных отношений в современной экономике и способствуют развитию всей экономики страны. В частности, в нашей стране в последние годы был сделан значительный прогресс в этом направлении, однако следует учитывать, что политика кластеров нашей страны должна соответствовать особенностям экономического развития страны.

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МАҲАЛЛИЙ ВА ХОРИЖИЙ ИНВЕСТИЦИЯЛАРНИ ЖАЛБ ЭТИШНИНГ ИННОВАЦИОН ЖАРАЁНЛАРГА ТАЪСИРИНИ БАҲОЛАШ

Аннотация. Мақолада миллий иқтисодиётга хорижий инвестицияларни жалб қилиши ва улардан самарали фойдаланиши йўлларини такомиллаштириши билан боғлиқжараёнлар тадқиқ этилган. Хорижий инвестицияларни жалб қилиши ва улардан самарали фойдаланиши жараёнларига таъсир кўрсатувчи омилларни мамлакат инвестицион фаолият самарадорлига таъсири баҳоланган. Хорижий инвестицияларни жалб қилиши ва улардан самарали фойдаланиши йўллари доирасида мавжуд камчиликлар аниқланган. Миллий иқтисодиётга хорижий инвестицияларни жалб қилиши тизимини такомиллаштиришига доир илмий таклиф ва амалий тавсиялар шакллантирилган.

Калит сўзлар: технологик ноу-хау, ижтимоий-иқтисодий тизим, патентлаштириши даражаси, инновация муҳити, инновацион самарадорлик.

Bobobekov E.A.
independent researcher
TDIU

ASSESSMENT OF THE IMPACT OF ATTRACTING LOCAL AND FOREIGN INVESTMENTS ON INNOVATION PROCESSES

Abstract. The article examines the processes related to attracting foreign investments to the national economy and improving the ways of their effective use. Factors influencing the processes of attracting foreign investments and their effective use were evaluated, and their impact on the effectiveness of the country's investment activities. In the framework of ways of attracting foreign investments and their effective use, existing shortcomings have been identified. A scientific proposal and practical recommendations on improving the system of attracting foreign investments to the national economy have been formulated.

Key words: technological know-how, socio-economic system, level of patenting, innovation environment, innovation efficiency.

Кириш

Объектларни бошқаришнинг сифати ва самараси операцияларни таҳлил этиш усулларини ҳозирги даврдаги тизимли ёндашувининг функционал таҳлил ёрдамида фойдаланиши иқтисодиёт учун XX асрдаги

иктисодий кашфиёт ҳисобланади. Лекин тизимли ёндашув иктисодиётнинг мураккаблиги туфайли кам қўлланилади. Бу бошқариш фалсафаси бўлиб, ўтиш даврида омон қолиш, мураккаб жараёнларни оддий жараёнларга айланиши, абстрактдан конкретга ўтишни ифодалайди.

Бозор тамойилларидан кенг фойдаланиш шароитида янги технологияларнинг кучайиб бориши, маҳсулот ва хизматларнинг рақобатчилик муҳитига мослашган ҳолда яратилишини тақозо қилмоқда ва бу жараёнда инновация ютуқларидан фойдаланиш тизимини ҳаётий зарурат қилиб қўйди. Мамлакатимизда иктисодиётнинг рақобатбардошлигини оширишнинг муҳим омили бўлган инновацияларга устувор йўналиш сифатида эътиборнинг қартилиши амалга оширилаётган иктисодий ислохотлар жараёни хўжалик юритувчи субъектлар фаолиятини сезиларли даражада ўзгариши ва улар фаолиятини бозор талабларига мослаштириш заруриятидан келиб чиқмоқда. Бу эса ўз навбатида ишлаб чиқариш ва хизмат кўрсатиш соҳаларини самарали ривожланишини таъминловчи инновацион фаолиятни бошқаришга алоҳида эътибор қаратишни талаб қилмоқда. Чунки, инновацион фаолият бозор муносабатлари шароитида тадбиркорликнинг илғор шакли бўлиб ҳисобланади ва у бозор иктисодиётида илмий-техника тараққиётини ривожланиши учун реал имкониятлар яратади.

Мавзуга оид адабиётлар шарҳи

Миллий иктисодиётга хорижий инвестицияларни жалб қилиш ва улардан самарали фойдаланиш йўлларини шакллантириш доирасидаги қатор тадқиқот изланишлари хорижлик иктисодчи олимлардан С.Лиесбетх, М.Миет, С.Жо илмийизланишларида алоҳида аҳамият касб этади. Тадқиқотчилар фикрича, ўтиш даври мамлакатларида иктисодиётни либераллаштириш жараёни тўғридан-тўғри хорижий инвестицияларни жалб қилиш тизimini такомиллаш-тиришнинг муҳим омили ҳисобланади. Тўғридан-тўғри капитални тўплаш ва технологик ноу-хау орқали миллий корхоналарга технологиялар ва билимларни жалб қилиниши иктисодий ўсишнинг барқарор суръатларини таъминлайди.

П.Миҳаела, А.Вақар, Х.Ҳелиан тадқиқотларида миллий иктисодиётга хорижий инвестицияларни жалб қилишнинг институционал механизми тадқиқ этилади. Тадқиқот натижаларига мувофиқ мамлакат иктисодиётидаги институционал сифат ўзгаришларининг тўғридан-тўғри хорижий инвестицияларни жалб этиш тизимига ижобий таъсир кўрсатиши қайд этилади.

В.Д.Андрианов илмий тадқиқотларида миллий иктисодиёт инвестицион салоҳиятининг назарий асослари ўрганилган бўлиб, инвестиция салоҳияти доирасидаги концепциялар назарий жиҳатдан умумлаштирилган, уни ошириш учун молиявий имтиёз-лардан тизимидан фойдаланиш мақсадга мувофиқлиги таъкидланган.

М.В.Чараева илмий тадқиқотларида ташкилотларнинг реал сармояларини молиявий бошқариш жараёнларининг концептуал асослари ўрганилган. Инновацион йўналтирилган иқтисодиёт шароитида реал сармояларни стратегик молиявий бошқариш хусусиятлари баён этилган.

Ф.У.Умаров тадқиқотларида иқтисодиётнинг тегишли тармоқ ва соҳаларига инвестиция жалб қилиш кўламини кенгайтиришнинг ташкилий-иқтисодий механизмлари ва ўзига хос хусусиятлари таҳлил қилинади.

А.Бурханов тадқиқотлари орқали ҳудудларга хорижий инвестицияларни жалб қилишнинг илмий-назарий жиҳатлари ўрганилиб, ҳудудларга хорижий инвестицияларни жалб этишнинг муаммоли жиҳатлари асосланган ҳамда уларни бартараф этишга қаратилган таклифлар ишлаб чиқилган.

Р.Ҳ.Бозоров илмий изланиш-ларида инвестиция муҳитининг омиллари, хусусиятлари, хорижий инвестиция-ларни жалб қилиш миллий иқтисодиётнинг халқаро индексларда иштирокига бевосита боғлиқлиги тадқиқ қилинган.

Тадқиқот методологияси

Илмий мақолани ёзиш жараёнида илмий тадқиқотни амалга оширишнинг тизимли таҳлил, тарихийлик ва мантиқийлик, индукция ва дедукция, анализ ва синтез, қиёсий ва селектив танлаб тадқиқ қилиш, монографик таҳлил ва гуруҳлаш усуллари қўлланилган.

Таҳлил ва натижалар

Кейинги йилларда иқтисодиётимизда юз бераётган жиддий таркибий ва сифат ўзгаришлар натижасида ялпи ички маҳсулотини шакллантиришда саноатнинг улуши 2000 йилда 14,2 фоиздан 2019 йилда 36 фоизга етди. Натижада ҳозирги кунга келиб саноат маҳсулоти умумий ўсишининг қарийб 70 фоизини юқори қўшилган қийматга эга бўлган тайёр маҳсулот ишлаб чиқаришга йўналтирилган соҳаларни ташкил этмоқда. Шунинг учун ҳам сўнгги йилларда қўлга киритилган натижалар халқаро жамоатчилик ва кузатувчилар, Халқаро валюта жамғармаси, Жаҳон банки, Осиё тараққиёт банки ва бошқа нуфузли халқаро молия ташкилотлари томонидан юксак баҳоланмоқда.

Бу эса, мамлакатимиз иқтисодий салоҳиятининг сезиларли даражада ортаётганлигидан далолат беради. Шунинг учун саноат корхоналарида инновацион жараёнларни тезлаштириш эвазига ишлаб чиқаришга замонавий технологияларни кенг жорий этиш, маҳсулот ва хизмат турларини муттасил янгилаб бориш негизида уларнинг рақобатбардошлигини таъминловчи механизмларни ривожлантириш миллий саноатни модернизациялашнинг устувор йўналишига айланган.

Ижтимоий-иқтисодий тизимнинг муҳим хусусиятлари қуйидагилардан иборат:

-илмий билимларнинг интеграллашуви, бир-бири билан боғлиқ бўлган фанлар миқдорининг кўпайиб боришидаги муаммолар;

–муаммоларнинг комплекс ҳолда эканлиги ва уларни техник, иқтисодий, ижтимоий, психологик ва бошқа қирраларини ҳисобга олган ҳолда ўрганиш зарурлиги;

–муаммолар ечими ва объектларнинг мураккаблашуви;

–объектлар ўртасида алоқалар сонининг ўсиши;

–ўзгарувчан ҳолатларнинг динамиклиги;

–ресурсларнинг ноёблиги;

–ишлаб чиқариш ва бошқариш жараёнлари элементларининг автоматлашуви ва стандартлаштириш даражасининг ошиб бориши;

–рақобатнинг, ишлаб чиқаришнинг, кооперациялашуви стандартлашув ва ҳоказоларнинг байналминаллашуви;

–бошқариш ва ҳоказоларда инсон омили ролининг ошиб бориши.

Айтиб ўтилган белгилар тизимли ёндашув усулини қўллашни талаб этади, чунки, бизнинг назаримизда унинг асосида бошқарув қарорлари сифатини оширишга эришилади. Тизимли ёндашув – объектни тизим сифатида таҳлил этиш методологияси ҳисобланади. Ижтимоий-иқтисодий тизим икки қисмдан иборат:

–ташқи муҳит, у кириш ва чиқиш тизимидан иборат ва ташқи муҳит билан алоқа (дастлаб ичига эътибор бериш)ни ифодалайди;

–ички таркиб – бошқариш субъектларини объектга таъсирини тизимга кириш ва чиқишни таъминлайдиган ўзаро боғлиқ бўлган компонентлар йиғиндисидан иборат.

Функционал ёндашув. Менежментга функционал ёндашувнинг моҳияти эҳтиёжларга, уни қондириш учун керак бўлган вазифалар йиғиндиси сифатида қаралишини ифодалайди. Вазифалар белгиланганидан сўнг уларни бажариш учун бир нечта муқобил объектлар ишланади ва уларнинг ичидан ҳаёт даврида фойдали самара бирлигига сарфланадиган минимум ялпи харажатлар талаб этадигани танлаб олинади.

Предметли ёндашув. Ҳозирги даврда бошқаришда асосан предметли ёндашувдан фойдаланилади, унинг ёрдамида мавжуд объект ривожлантирилади. Масалан, мавжуд бўлган техник тизим илмий-техника тараққиёти таҳлили, истеъмолчиларнинг таклифларини маркетинг тадқиқотлари ёрдамида ўрганиш ва унинг натижаларига асосланган ҳолда такомиллаштирилади.

Предметли ёндашувдан фойдаланган ҳолда инвестор ва менежерлар кечаги кунга етиб олишга ҳаракат қиладилар ва ҳеч қачон жаҳон даражасига кўтарила олмайдилар. Ижтимоий-иқтисодий тизимнинг ривожланишига предметли ёндашувдан фойдаланган ҳолда менежерлар такомиллаштиришнинг мавжуд тизимидан фойдаланадилар. Тажрибада менежерлар мавжуд бўлган ишчи ва ходимларга иш топиш муаммоси билан шуғулланадилар. Функционал ёндашувда истеъмолдан ташқарига «чиқиш» талабидан «кириш» имкониятига қараб ҳаракат қиладилар.

Маркетинг ёндашуви. Маркетинг йўналиши менежмент тизимидаги кичик тизимни бошқаришда истеъмолчиларга мўлжалланган ҳар қандай вазифа ечимини топишга қаратилади. Масалан, корхона стратегияси мавжуд бўлган ва келажақда ишлаб чиқариладиган маҳсулотлар ва хизматларга бўлган талаб ва таклифларга асосланади. Келажақда стратегия эҳтиёжларни, бозор сегментацияси стратегиясини функционал ва предметли ёндашувнинг белги-ларини ишлаб чиқишни тақозо этади.

4-жадвал

Инновацион жараёнларда функционал ва предметли ёндашувларнинг фарқлари

Белгилари	Предметли ёндашув	Функционал ёндашув
Маркетинг тадқиқотларнинг кўлами ва сифати	Аҳамиятли эмас	Аҳамиятли
Мавжуд маҳсулотдан бозор эҳтиёжларининг даражаси	Тўлиқ эмас	Тўлиқ
Маҳсулотни такомиллаштиришда техник ёндашув	Ишлаб чиқарилаётган моделдаги маҳсулотга мослаштириш асосида	Мутлақ янги маҳсулотни ишлаб чиқариш асосида
Маҳсулотни янгилашни режалаштиришда таққослаш асоси	Рақобатчиларнинг энг янги намуналари	Бозордаги янги чиқарилаётган маҳсулотларга нисбатан янгиларини ишлаб чиқиш
Маҳсулотнинг янгилик даражаси (патентлаштириш даражаси)	Ишлаб чиқарилган маҳсулотни такомиллаштириш	Янги сифатли маҳсулотларни ишлаб чиқиш
Ишланмаларда меҳнат сиғими ва янги маҳсулотларни ўзлаштириш	Паст	Юқори
Технологияларнинг янгилик даражаси	Паст	Юқори
Ишлаб чиқаришни ва меҳнатни ташкил этиш	Мавжуд тузилмани такомиллаштириш	Янги корхонани лойиҳалаштириш
Бозорни ўзлаштириш даражаси	Тўла ўзлаштирилган	Бозор эски ёки янги бўлиши мумкин
Маҳсулотни рақобатбардошлиги	Паст	Юқори

Маркетинг ёндашувидан фойдаланилганда менежмент мезонини танлашнинг устувор йўналишлари қуйидагилардан иборат бўлади:

- истеъмолчиларнинг истакларига мос равишда объектнинг сифатини ошириш (тизимдан чиқиш);
- объектга хизмат кўрсатиш ва бошқа омиллар сифатини ошириш ҳисобига истеъмолчилар ресурсларини тежаш;
- кўлам омилини амалга ошириш, илмий-техника тараққиёти, менежмент тизимини такомиллаштириш асосида ишлаб чиқариш объектларида ресурсларни тежаш.

Хўжалик юритишнинг марказий-режалаштириш тизимида ишлаб чиқаришга ёндашишнинг устувор муқобил йўналиши қуйидагилардан иборат бўлган:

- маҳсулот таннархини пасайтириш, баъзида таннархни оширишдан фойдали бўлган;
- маҳсулот сифатини ошириш, истеъмолчининг маҳсулотга сарфлари белгиланмаган ва бошқарилмаган.

Замонавий бозор шароитида мурасасиз рақобатнинг тобора кучайиб бориши корхоналарни юқори даражадаги интеллектуал салоҳият ва самарали технологияга асосланган инновацион фаолиятни ташкил этишни талаб қилмоқда. Шу боисдан, инновацион фаолият билан боғлиқ масалаларни ҳал этишда асосий эътиборни инновацияларни яратувчанлик салоҳияти билан биргаликда, илм-фан ютуқларини ишлаб чиқариш жараёнига татбиқ этиш муҳим аҳамият касб этади. Бунинг учун эса мамлакатда инновацион фаолият билан шуғулланувчи корхоналар ва илмий тадқиқот муассасалари ўртасида инновацион ҳамкорликни яхшилаш, уларнинг моддий баъзасини янада такомиллаштириш ва ҳар томонлама қўллаб-қувватлаш, яратилаётган инновацияларни ишлаб чиқариш жараёнига татбиқ этиш бўйича самарали механизмни шакллантириш каби масалаларини ҳал қилиш лозим.

Инновацион фаолият билан шуғулланаётган корхоналарга – янги ёки такомиллаштирилган маҳсулотлар, хизматлар, технологиялар ёки ишлаб чиқариш усуллари ва бошқа инновацион фаолият турларини ишлаб чиқиш ва жорий этиш мақсадида ташкил этилган инновацион фаолият (инфратузилма) субъектига айтилади.

Ўзбекистон иқтисодиёти ривожланишининг ҳозирги босқичида инновация инсоният тараққиёти ва иқтисодий ўсишнинг асосий омилига айланмоқда. Инновацияларни алоҳида корхоналар ва қолаверса, бутун иқтисодиётнинг фаолият кўрсатишига таъсирини муҳим аҳамияти мамлакатимиз ва хорижий иқтисодчилар томонидан тадқиқ этилган ҳамда ўрганилган.

“Инновацион корхоналар” атамаси “инновация” сўзи моҳиятини очиб берилиши билан тавсифланади. Шунини таъкидлаш керакки, бу тушунчага ўзбек, рус ва хориж адабиётларида ҳам кўплаб таърифлар берилган. “Инновацион корхона” тушунчаси негизида “инновация” ҳамда “новация” сўзлари ётади.

Бугунги кунда инновацион корхоналар фаолиятини ташкил этишда хориж тажрибасига таяниб, илмий тадқиқотлар натижасидан келиб чиқиб амалиётга жорий қилиш муваффақият келтиради. Аммо, замонавий корхоналарнинг инновацион фаолиятини самарали ташкил этиш жараёнига бир қатор омиллар таъсир кўрсатади. Буларга:

– корхонанинг инновацион салоҳияти (корхонанинг илмий салоҳияти, ходимларнинг инновацион бизнес соҳасидаги билимларга эгаллик даражаси,

илмий тадқиқотларга жалб қилинган мутахассислар сони, корхонанинг инновацион маҳсулот яратишда замонавий жиҳозлар билан таъминланган лабораторияларнинг мавжудлиги ҳамда улардан фойдаланиш самарадорлиги);

– корхонанинг жойлашган ҳудудлар иқтисодий салоҳияти (фаолият юритувчи корхоналар сони ва фаолият турлари, улар ўртасида рақобат муҳитининг шаклланганлиги, уларнинг географиясидан келиб чиқиб инновацияларни ўзлаштира олиш имкониятлари);

– корхонанинг кадрлар салоҳияти (ходимларнинг мутахассисликлари ва илмий даражалари, айнан инновацион маҳсулот яратиш учун жалб қилинган ходимлар сони ва бошқалар);

– корхонанинг инвестицион салоҳияти (инновацияларни яратиш ёки уларни амалиётга татбиқ этишдаги харажатларни тўла молиялаштириш имкониятлари, инновацияларни яратишдаги тадқиқотлари ва ходимларнинг иш ҳақи бўйича салоҳияти ва бошқалар).

Замонавий корхонанинг инновацион маҳсулотларни яратишдаги илмий салоҳияти унда олиб борилаётган илмий тадқиқот натижаларининг сифати ва сонига таъсир этувчи энг асосий омиллардан бири ҳисобланади. Ходимларнинг хорижий тажрибаларга эгаллиги ва ўз соҳалари бўйича етарли билимга, замонавий фан-техника ютуқларини тезкорлик билан ўзлаштира олиш қобилиятига эгаллиги, турли соҳаларда мавжуд муаммоларни аниқ кўра билиши ва ўз билимларини ана шу муаммоларни ҳал этишда қўллаш олиши корхоналарнинг инновацион фаоллигини, яратилган инновацияларнинг ишлаб чиқаришга татбиқ этилиш имкониятини оширади.

Инновацион корхоналар фаолияти бўйича хориж амалиётига эътибор қаратадиган бўлсак бу борада Жанубий Кореяни мисол келтиришимиз мумкин. Жумладан, Корея Республикаси Халқаро инновацион индексда 12-поғонани эгаллаб, ҳатто Япония, Италия, Финляндия каби мамлакатлардан ҳам юқори ўринда туради. Блумберг Инновацион Индекси рейтингда эса илмий тадқиқотлар, олий таълим тизими ва патент фаолияти бўйича дунёда етакчи ўринни эгаллайди. Корея давлат статистика қўмитасининг маълумотларига кўра, бугунги кунда 3,35 миллиондан ортиқ кичик ва ўрта инновацион корхона фаолият юритиб келмоқда, бу рўйхатга олинган хўжалик юритувчи субъектларнинг 99,9 фоизини ташкил этади. Ўз навбатида, аҳолининг иш билан таъминлаш даражаси эса 87,7 фоизни ташкил этади. Бу инновацион тадбиркорликни қўллаб-қувватлаш, айниқса ёшларнинг стартап лойиҳаларини ишга туширишда ўзига хос қулай шарт-шароитлар яратилиши туфайли эришилган натижалардир.

Корхона ва ташкилотлардаги инновацияларнинг иқтисодий таркиби авваломбор, доимий ҳисобланган ишлаб чиқариш ресурсларини эркинлаштириш учун хизмат қиладиган параметрларда ифодаланади. Бунда энг аввал корхоналардаги материал, меҳнат, фонд сиғимлари кўрсаткичлари ўзгаради. Бу асосий кўрсаткичлар корхоналарнинг иқтисодий тараққиёти

турли босқичларида турли даражадаги инновация жараёнлари таъсири остида бўлади. Жумладан, ишлаб чиқариш жараёнида қўл меҳнатидан автоматлашган меҳнатга ўтиш босқичида ишлаб чиқаришнинг меҳнат сифими ва фонд сифимида ўзгаришлар юз беради, яъни меҳнат сифимининг қисқариши фонд сифими ошишига олиб келади.

Корхоналарнинг инновацион самарадорлигини ҳисобга олиш, таҳлил қилиш ва ошириш учун уларни ички ва ташқи миқёсда асосли классификациялаш зарур. Инновацияларнинг ўйлаб топилган ва илмий асосланган классификацияси уларни нафақат оқилона ҳисобга олиш, балки қўллаш даражасини ҳам ҳар томонлама таҳлил этиш ва шу асосда самарали инновация сиёсатини, жумладан, корхонанинг инновацион салоҳияти учун ишлаб чиқариш ва амалга ошириш борасида зарур маълумотга эга бўлиш имконини беради.

Корхоналар фаолиятига фан-техника тараққиётидан фарқли равишда, инновация жараёнини татбиқ этиш босқичи, яъни бозорда янги маҳсулот, хизматнинг илк бор пайдо бўлиши, янги технологиянинг лойиҳа даражасига етиши билан тугалланмайди. Бу жараён татбиқ этишдан кейин ҳам узилмайди, у ёйилиш даражасига қараб, янгилик мукаммаллаштирилади.

Натижада аввал маълум бўлмаган истеъмолчилик хусусиятлари ҳосил бўлади. Бу эса корхоналар учун янги бозорлар ва қўлланиш соҳаларини очади, ўз навбатида мазкур маҳсулот, технология ва хизматларни ўзлари учун янги сифатида қабул қиладиган истеъмолчиларни топади.

Корхоналар учун бу жараён татбиқ этилгандан кейин ҳам инновацион фаолият узилмайди, унинг қамраб олиш ва ёйилиш даражасига қараб, янгилик мукаммаллаштирилиб борилади ва аввалгисига нисбатан анча самаралироқ кечади. Аввал маълум бўлмаган янги истеъмол хусусиятлари ҳосил бўлади. Бу эса, унинг учун янги бозорлар ва қўлланиш соҳаларини очади, ўз навбатида, мазкур маҳсулот, технология ва хизматларни ўзлари учун маъқул истеъмолчиларни топади. Шундай қилиб, бу жараён бозор талаб қиладиган маҳсулотлар, технологиялар ёки хизматларни яратишга йўналтирилган ва у албатта, амал қиладиган ва ривожланадиган ижтимоий-иқтисодий муҳитнинг суръатлари, мақсадларига боғлиқ бўлади.

Хулоса ва таклифлар

Бугунги кунда Ўзбекистон корхоналари учун иқтисодий ҳолатни баҳолашга мос келадиган “инновация муҳити” ибораси бўлғуси инновациялар учун корхоналар жозибадорлигини тавсифлайди. Инновация муҳитини баҳолашда одатда бир қатор параметр ёки белгилар қўлланилади. Мазкур параметрлар корхонанинг инновацияларни жорий этиш салоҳияти ва уларни амалга ошириш таваккалини тавсифловчи белгилардир. Уларнинг энг асосийлари қуйидагилардир:

- макроиқтисодий барқарорлик;
- инновация фаолиятининг ҳуқуқий асослари;
- солиқ тизимининг сифати ва солиққа тортиш даражаси;

- банк тизими ва бошқа молиявий институтлар ҳолати ва ишончилиги;
- инфратузилманинг ривожланиш даражаси;
- ҳамкорлар томонидан шартнома мажбуриятларининг бажарилиши;
- давлат бошқарув тизими.

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Боймирзаев Ф.Р.
преподаватель
Международный институт пищевых технологий и инженерии
Республика Узбекистан, г.Фергана

РЕШЕНИЕ ИНТЕГРАЛЬНЫХ УРАВНЕНИЙ АБЕЛЯ С ПОМОЩЬЮ ДРОБНЫХ ОПЕРАТОРОВ

Аннотация. В данной работе операторы дробного порядка и интегральные уравнения Абеля используются при решении сложных моделей, уравнений моделирования материалов и движения. Используя интегральное уравнение Абеля, свойства дробных операторов, решение задачи представлено с помощью дробных интегралов и дробных производных.

Ключевые слова: Дробные операторы, дробная производная, дробный интеграл.

Boymirzayev F.R.
lecturer
International Institute of Food Technologies and Engineering
Republic of Uzbekistan, Fergana

SOLUTION OF ABELIAN INTEGRAL EQUATIONS USING FRACTIONAL OPERATORS

Abstract. In this work, fractional order operators and Abel's integral equations are used in solving complex models, materials and motion modeling equations. Using the Abel integral equation, the properties of fractional operators, the solution of the problem is presented with the help of fractional integrals and fractional derivatives.

Key words: Fractional operators, fractional derivative, fractional integral.

Это

$$\frac{1}{\Gamma(\alpha)} \int_{\alpha}^x \frac{\varphi(t) dt}{(x-t)^{1-\alpha}} = f(x), \quad 0 < \alpha < 1(1)$$

интегральное уравнение в виде называется интегральным уравнением Абеля [1].

Уравнение (1) решается следующим образом. В этом уравнении мы смешиваем x с t и t с s , затем умножаем обе части уравнения на выражение $(x-t)^{-\alpha}$ и интегрируем от a до x по t :

$$\int_a^x \frac{dt}{(x-t)^\alpha} \int_a^t \frac{\varphi(s)ds}{(t-s)^{1-\alpha}} = \Gamma(\alpha) \int_a^x \frac{f(t)dt}{(x-t)^\alpha}.$$

Заменив порядок интегрирования по формуле Дирихле,

$$\int_a^x \varphi(s)ds \int_s^x \frac{dt}{(x-t)^\alpha (t-s)^{1-\alpha}} = \Gamma(\alpha) \int_a^x \frac{f(t)dt}{(x-t)^\alpha} \quad (2)$$

мы составляем уравнение. Подставив $t = s + \tau(x-s)$ во внутренний интеграл в левой части уравнения, получим

$$\int_s^x (x-t)^{-\alpha} (t-s)^{\alpha-1} dt = \int_0^1 \tau^{\alpha-1} (1-\tau)^{-\alpha} d\tau = B(\alpha, 1-\alpha) = \Gamma(\alpha)\Gamma(1-\alpha)$$

следует равенство. Тогда согласно (2).

$$\int_a^x \varphi(s)ds = \frac{1}{\Gamma(1-\alpha)} \int_a^x \frac{f(t)dt}{(x-t)^\alpha}. \quad (3)$$

Дифференцируя обе части этого уравнения, формируем решение интегрального уравнения Абеля [1]:

$$\varphi(s) = \frac{1}{\Gamma(1-\alpha)} \frac{d}{dx} \int_a^x \frac{f(t)dt}{(x-t)^\alpha}. \quad (4)$$

Таким образом, если решение уравнения (1) существует, оно выражается в виде (4). Из процесса формулировки следует, что если решение существует, то оно единственно.

Таким образом, можно показать, что это

$$\frac{1}{\Gamma(\alpha)} \int_x^b \frac{\varphi(t)dt}{(t-x)^{1-\alpha}} = f(x), \quad 0 < \alpha < 1 \quad (5)$$

решение интегрального уравнения

$$\varphi(x) = -\frac{1}{\Gamma(1-\alpha)} \frac{d}{dx} \int_x^b \frac{f(t)dt}{(t-x)^\alpha} \quad (6)$$

определяется по формуле.

Как известно из курса математического анализа, для n -кратного интеграла подходит следующая формула:

$$\int_a^{x_0} dx_1 \int_a^{x_1} dx_2 \dots \int_a^{x_{n-1}} \varphi(t)dt = \frac{1}{(n-1)!} \int_a^{x_0} (x_0-t)^{n-1} \varphi(t)dt, \quad n \in N. \quad (7)$$

$(n-1)! = \Gamma(n)$ с учетом этого правую часть уравнения (7) можно определить даже для дробных значений n [2].

(7) определяем интегралы дробного порядка, соответствующие равенству, в следующем порядке.

Описание. $\varphi(x) \in L_1(a, b)$ ($a < b < +\infty$) будь как будет Этот

$$D_{xb}^{-\alpha} \varphi(x) = \frac{1}{\Gamma(\alpha)} \int_x^b (t-x)^{\alpha-1} \varphi(t) dt, \quad \alpha > 0 \quad (8)$$

выражения в $\varphi(x)$ форме называются интегралами α (дробного) порядка (в смысле Римана-Лиувилля) от функции.

Функции $D_{ax}^{-\alpha} \varphi(x)$ и $D_{xb}^{-\alpha} \varphi(x)$ определены почти во всех точках интервала (a,b) и принадлежат классу $L_1(a,b)$.

На основе этого определения интегральные уравнения Абеля (1) и (5)

$$D_{ax}^{-\alpha} \varphi(x) = f(x), \quad D_{xb}^{-\alpha} \varphi(x) = f(x) \quad (9)$$

можно записать в форме.

Если $0 < \alpha_1, \alpha_2 < +\infty$ почти для всех $x \in (a,b)$.

$$D_{ax}^{-\alpha_2} D_{ax}^{-\alpha_1} f(x) = D_{ax}^{-\alpha_1} D_{ax}^{-\alpha_2} f(x) = D_{ax}^{-(\alpha_1+\alpha_2)} f(x) \quad (10)$$

равенство будет уместным. Действительно,

$$\begin{aligned} D_{ax}^{-\alpha_2} D_{ax}^{-\alpha_1} f(x) &= \frac{1}{\Gamma(\alpha_1)} D_{ax}^{-\alpha_2} \int_a^x (x-s)^{\alpha_1-1} f(s) ds = \\ &= \frac{1}{\Gamma(\alpha_1)\Gamma(\alpha_2)} \int_a^x \left[\int_a^t (t-s)^{\alpha_1-1} f(s) ds \right] (x-t)^{\alpha_2-1} dt = \\ &= \frac{1}{\Gamma(\alpha_1)\Gamma(\alpha_2)} \int_a^x f(s) ds \int_s^x (x-t)^{\alpha_2-1} (t-s)^{\alpha_1-1} dt. \end{aligned}$$

В результате подстановки в последний внутренний интеграл $t = s + (x-s)\tau$ получим следующее уравнение[1]:

$$\begin{aligned} \int_s^x (x-t)^{\alpha_2-1} (t-s)^{\alpha_1-1} ds &= (x-s)^{\alpha_1+\alpha_2-1} \int_0^1 \tau^{\alpha_1-1} (1-\tau)^{\alpha_2-1} d\tau = \\ &= \frac{\Gamma(\alpha_1)\Gamma(\alpha_2)}{\Gamma(\alpha_1+\alpha_2)} (x-s)^{\alpha_1+\alpha_2-1} \end{aligned}$$

Это показывает, что уравнение (10) верно.

По определению,

$$D_{ax}^0 f(x) = f(x) \quad (11)$$

мы так думаем.

Описание. Пусть функция $\varphi(x)$ определена в разделе $[a,b]$.

$$D_{ax}^{\alpha} \varphi(x) = \frac{1}{\Gamma(1-\alpha)} \frac{d}{dx} \int_a^x \frac{\varphi(t) dt}{(x-t)^{\alpha}}, \quad 0 < \alpha < 1, \quad (12)$$

$$D_{xb}^{\alpha} \varphi(x) = -\frac{1}{\Gamma(1-\alpha)} \frac{d}{dx} \int_x^b \frac{\varphi(t) dt}{(t-x)^{\alpha}}, \quad 0 < \alpha < 1 \quad (13)$$

выражения в виде называются производными α (десятичного) порядка (в смысле Лиувилля) от $\varphi(x)$ функции.

На основе этого определения уравнения (4) и (6), дающие решения интегральных уравнений Абеля (1) и (5) соответственно

$$\varphi(x) = D_{ax}^\alpha f(x), \quad \varphi(x) = D_{xb}^\alpha f(x) \quad (14)$$

можно записать в форме.

Напомним, что интегралы дробного порядка $\alpha > 0$ определяются в соответствии с порядком. Но (12), (13) дробные производные определены только тогда, когда они равны $0 < \alpha < 1$. Прежде чем перейти к определению производных дробного порядка при $\alpha \geq 1$, приведем достаточное условие существования производных дробного порядка.

Лемма. Если функция $\varphi(x)$ абсолютно непрерывна на участке $[a, b]$, то почти во всех точках участка $[a, b]$ имеются дробные производные функции $\varphi(x)$ и подходят следующие формулы:

$$D_{ax}^\alpha \varphi(x) = \frac{1}{\Gamma(1-\alpha)} \left[\frac{\varphi(a)}{(x-a)^\alpha} + \int_a^x \frac{\varphi'(t) dt}{(x-t)^\alpha} \right], \quad 0 < \alpha < 1,$$

$$D_{xb}^\alpha \varphi(x) = \frac{1}{\Gamma(1-\alpha)} \left[\frac{\varphi(b)}{(b-x)^\alpha} + \int_x^b \frac{\varphi'(t) dt}{(t-x)^\alpha} \right], \quad 0 < \alpha < 1.$$

Пример. $\varphi(x) = (x-a)^{\alpha-1}$ быть. Тогда, исходя из равенства (1.1.13),

$$D_{ax}^\alpha \varphi(x) = \frac{1}{\Gamma(1-\alpha)} \frac{d}{dx} \int_a^x (x-t)^{-\alpha} (t-a)^{\alpha-1} dt.$$

Если заменить интегральную переменную $t = a + (x-a)z$ формулой,

$$D_{ax}^\alpha \varphi(x) = \frac{1}{\Gamma(1-\alpha)} \frac{d}{dx} \int_0^1 z^{\alpha-1} (1-z)^{-\alpha} dz = \frac{1}{\Gamma(1-\alpha)} \frac{d}{dx} B(\alpha, 1-\alpha) = 0$$

следует равенство. Итак, функция $\varphi(x) = (x-a)^{\alpha-1}$ выступает в качестве постоянного числа для производной второго порядка $\alpha \in (0, 1)$.

Теперь $\alpha \geq 1$, пусть $[\alpha]$ - его целая часть, а $\{\alpha\}$ - дробная часть. Если α - целое число, мы получаем простые производные в классе α порядковых производных:

$$D_{ax}^\alpha = \left(\frac{d}{dx} \right)^\alpha, \quad D_{xb}^\alpha = \left(-\frac{d}{dx} \right)^\alpha, \quad \alpha = 1, 2, 3, \dots$$

Если α - не целое число, мы определяем упорядоченные производные следующим образом:

$$D_{ax}^\alpha \varphi(x) = \left(\frac{d}{dx} \right)^{[\alpha]} D_{ax}^{\{\alpha\}} \varphi(x) = \left(\frac{d}{dx} \right)^{[\alpha]+1} D_{ax}^{\{\alpha\}-1} \varphi(x),$$

$$D_{xb}^{\alpha} \varphi(x) = \left(-\frac{d}{dx}\right)^{[\alpha]} D_{xb}^{\{\alpha\}} \varphi(x) = \left(-\frac{d}{dx}\right)^{[\alpha]+1} D_{xb}^{\{\alpha\}-1} \varphi(x).$$

Итак, в общем, когда $\alpha \geq 1$.

$$D_{ax}^{\alpha} \varphi(x) = \left(\frac{d}{dx}\right)^n D_{ax}^{\alpha-n} \varphi(x), \quad n = [\alpha] + 1, \quad (15)$$

$$D_{xb}^{\alpha} \varphi(x) = (-1)^n \left(\frac{d}{dx}\right)^n D_{xb}^{\alpha-n} \varphi(x), \quad n = [\alpha] + 1. \quad (16)$$

Обычно класс функций, выражаемых в виде дробных интегралов α ($\alpha > 0$), определяется формулой $D_{ax}^{-\alpha}(L_p)$, т.е.

$$D_{ax}^{-\alpha}(L_p) = \{f(x) : f(x) = D_{ax}^{-\alpha} \varphi(x), \quad \varphi(x) \in L_p(a, b), \quad 1 \leq p < \infty\}.$$

Имеет место следующая теорема.

Теорема. $\alpha > 0$ быть. В таком случае

$$D_{ax}^{\alpha} D_{ax}^{-\alpha} \varphi(x) = \varphi(x), \quad D_{xb}^{\alpha} D_{xb}^{-\alpha} \varphi(x) = \varphi(x) \quad (17)$$

равенства для всех $\varphi(x) \in L_1(a, b)$ функций,

$$D_{ax}^{-\alpha} D_{ax}^{\alpha} \varphi(x) = \varphi(x), \quad D_{xb}^{-\alpha} D_{xb}^{\alpha} \varphi(x) = \varphi(x) \quad (18)$$

и все равенства соответственно

$$\varphi(x) \in D_{ax}^{-\alpha}(L_1), \quad \varphi(x) \in D_{xb}^{-\alpha}(L_1)$$

выполняется для функций.

Если $\varphi(x) \in L_1(a, b)$ вместо последних условий, то уравнения (18) будут в общем случае неверными и, например, первое будет заменено следующей формулой [3].

$$D_{ax}^{-\alpha} D_{ax}^{\alpha} \varphi(x) = \varphi(x) - \sum_{k=0}^{n-1} \frac{(x-a)^{\alpha-k-1}}{\Gamma(\alpha-k)} \varphi_{n-a}^{(n-k-1)}(a),$$

$$\text{здесь } n = [\alpha] + 1, \quad \varphi_{n-a}(x) = D_{ax}^{\alpha-n} \varphi(x).$$

Итак, интегральные уравнения Абеля и их решения определяются уравнениями (9) и (14), и чтобы поставить функции в уравнения (14) и (9), необходимо выполнить условие приведенной выше теоремы.

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ЎЗБЕКИСТОН РЕСПУБЛИКАСИДА ОИЛАВИЙ ТАДБИРКОРЛИКНИ РИВОЖЛАНТИРИШ МАСАЛАЛАРИ

Аннотация. Бугунги кунда республикамызда оилавий тадбиркорликни ривожлантириши орқали аҳоли даромадларини кўпайтириши, уларнинг яшаш фаровонлигини ошириши мақсадида кўплаб лойиҳаларга қўл урилмоқда. Мазкур саъй-ҳаракатларнинг самараси ўлароқ бугун ўз бизнесини бошлаган тадбиркорлик субъектларининг фаолияти, уларни қийнаётган муаммолар, аҳолининг бизнес ташаббусларини ўрганиб чиқиб, таҳлиллар асосида таклифлар ишлаб чиқиш бугунги кундаги долзарб ҳисобланади.

Калит сўзлар. Бизнес, оилавий тадбиркорлик, тадбиркорлик, кредит, имтиёз, кафиллик, валюта, лойиҳа, солиқ ставкаси, фоииз ставкаси, лизинг, ипотека.

*Boltaev J.
senior lecturer
Tashkent State University of Economics*

ISSUES OF FAMILY BUSINESS DEVELOPMENT IN THE REPUBLIC OF UZBEKISTAN

Abstract. Today, many projects are being implemented in our republic in order to increase the income of the population and increase their living comfort through the development of family entrepreneurship. As a result of these efforts, it is urgent today to study the activities of business entities that have started their business, the problems they face, the business initiatives of the population, and develop proposals based on the analysis.

Keywords. Business, family business, entrepreneurship, loan, concession, guarantee, currency, project, tax rate, interest rate, lease, mortgage.

Кириш

Ривожланган давлатлар тажрибаси шуни кўрсатмоқдаки, мамлакат иқтисодиётининг барқарор ривожланишида, аҳоли бандлиги ва даромадини оширишда энг асосийси тадбиркорликни ривожлантириш орқали мамлакатда камбағалликни қисқартиришда оилавий тадбиркорлик соҳаси фаолияти муҳим аҳамият касб этибгина қолмай, иқтисодий ҳамда ижтимоий муаммоларни ҳал этишда ўз ўрнига эга.

Президентимизнинг 2023 йил 15 ноябрда “Аҳолини кичик ва ўрта бизнесга кенг жалб қилишнинг қўшимча чора-тадбирлари тўғрисида” ги 366 сонли қарори қабул қилинди.

Қарор бўйича аҳоли ва тадбиркорлик субъектларини ўргатиш, ўқитиш орқали уларнинг бизнес ташаббусларини молиявий ва консултиватив қўллаб-қувватлаш тизими йўлга қўйилиб, “оилавий тадбиркор - микробизнес – кичик бизнес – ўрта бизнес” занжири яратилади ва шу асосда уларнинг фаолиятини кенгайтириш, қўллаб қувватлаш учун шароитлар яратилиши таъминланади.

Мавзуга оид адабиётлар таҳлили

Тадбиркорликни ривожлантириш, шунингдек бизнесни давлат томонидан қўллаб-қувватлаш, уни амалга оширишнинг стратегик ва тактик йўналишлари билан боғлиқ илмий тадқиқотлар узоқ тарихга бориб тақалади. Тадбиркорликни ривожлантириш, уларни фаолиятини ривожлантириш масалалари кенг ўрин олиб келган. Бу масалалар борадаси бир қанча олимлар илмий тадқиқотлар олиб борган. Жумладан, А.Смит томонидан халқларнинг бойлиги моҳияти ва сабабларини ўрганиш, Р.Хизрич ва М.Питерс томонидан тадбиркорликни ривожлантириш омиллари, тадбиркорлик фазилатларини баҳолаш усуллари атрофлича ўрганилган ва керакли таклиф ва тавсиялар келтирилган.

Шунингдек кичик бизнес ва хусусий тадбиркорлик соҳасини тадқиқ этиш ҳамда эконометрик моделлаштириш бўйича В.М.Власова, А.Раиский, А.Шестаков, Н.Е.Егорова, В.М.Савченко, В.М.Шепелов ва М.А.Федотовалар илмий изланишлар олиб боришган.

Ўзбекистонда кичик бизнес ва тадбиркорликнинг умумий муаммолари, статистик кўрсаткичларини такомиллаштириш ҳамда прогнозлаш, оилавий тадбиркорликни ривожлантириш ва уларга давлат томонидан берилаётган имкониятлар бўйича маҳаллий олимлардан С.С.Гуляммов, Ё.Абдуллаев, Б.К.Ғойибназаров, О.Т.Кенжабоев, О.Қ.Рихсимбоев, А.Б.Югай, Н.Қ.Муродова, З.Я.Худойбердиева, Ҳ.П.Абулқосимов А.А. Қулматовлар томонидан илмий изланишлар олиб борганлар.

Тадқиқот методологияси.

Мақолада мантикий усул, таҳлил ва синтез, норматив ёндашув, тизимли ва қиёсий таҳлил усулларидадан фойдаланилган.

Таҳлил ва натижалар муҳокамаси.

Бугунги кунда олиб борилаётган ислохотлар борасида тадбиркорлар қуйидаги молиявий тизим орқали қўллаб-қувватланиши белгиланган:

- “Бизнесни ривожлантириш банки” АТБ
- “Тадбиркорликни ривожлантириш компанияси” АЖ
- Ҳамкор тижорат банклари ва микромолия ташкилотлари

1.Бизнесни ривожлантириш банки томонидан “Кичик бизнесни узлуксиз қўллаб-қувватлаш” комплекс дастурини 2023-2026 йилларда

амалга ошириш учун давлат маблағлари ҳисобидан 6 триллион сўм ва халқаро молия институтларининг 1,2 миллиард АҚШ доллари миқдоридаги маблағлари йўналтирилиши кўзда тутилган.

Мазкур дастурни амалга ошириш учун Бизнесни ривожлантириш банки қошида масъулияти чекланган жамияти шаклида Кичик бизнесга кўмаклашиш марказлари ташкил этилади ва улар томонидан кичик тадбиркорлик субъектлари молиявий ва консултатив қўллаб-қувватланади.

Шу асосда дастур доирасида имтиёзлар берилиши кўзда тутилган бўлиб, ушбу имтиёзлар:

- камида бир йил мобайнида фаолият юритаётган яқка тартибдаги тадбиркорлар, деҳқон хўжаликлари, ўзини ўзи банд қилган шахслар, ҳунармандлар, касаначилар, нодавлат таълим ташкилотлари, уч ва ундан ортиқ кишини иш билан таъминлаётган кичик тадбиркорлик субъектлари;

- оилавий тадбиркорлик дастурлари доирасида ўз бизнес лойиҳаларини муваффақиятли амалга ошириб, ижобий кредит тарихига эга бўлган юридик ва жисмоний шахслар онлайн ариза юбориш орқали иштирок этади.

Дастурида иштирок этувчи кичик тадбиркорлик субъектларини шаффофлик тамойиллари асосида танлаб олиш босқичлари қуйидагилардан иборат бўлади:

- Ариза берилади ва банклар кўмагида скоринг баҳолаш ўтказилади
- Ҳоким ёрдамчилари томонидан саволнома асосида ўрганилади
- Лойиҳаларни баҳолаш ва танлаш гуруҳлари томонидан ташаббускорларнинг тадбиркорлик кўникмаси ва бизнес-режаларининг яшовчанлигини баҳолаш асосида истиқболли лойиҳалар танлаб олинади
- Марказлар томонидан ўқитиш ташкил этилади ва имтиҳондан муваффақиятли ўтганларга сертификат берилади
- Тижорат банклари, жамғарма ва марказлар томонидан молиявий ва консултатив қўллаб-қувватланади
- Марказлар ва тижорат банклари томонидан бизнес режалари амалга оширилишининг мониторинги юритилади.

Лойиҳалар қуйидаги йўналишларда қўллаб-қувватланиши таъминланади:

молиявий қўллаб-қувватлаш йўналишида:

- 2 йил имтиёзли давр билан 7 йилгача, айланма маблағлар учун револьвер тарзда 3 йилгача муддатга
- фоиз ставкаси (Марказий банк асосий ставкаси + 4)
- 1,5 миллиард сўмгача кредитлар ажратиш ёки асосий воситаларни сотиб олиш учун лизинг бериш. Бунда, 100 миллион сўмгача кредитларни гаровсиз, 150 миллион сўмгача кредитларни гаров талаби 50 фоизгача пасайтирилган ҳолда ажратиш имконияти назарда тутилади

- қиймати 1,5 миллиард сўмгача бўлган асосий воситаларни 7 йилгача бўлиб-бўлиб тўлаш шарти билан қарзга беради

- инновацион ишланмаларни тижоратлаштириш, юқори технологик стартап лойиҳаларига давлат илмий дастурлари доирасида 2 миллиард сўмгача грант маблағларини ажратади.

консультатив қўллаб-қувватлаш йўналишида:

- лицензия, рухсатнома ва сертификатлар олиш, божхона ва солиқ маъмуриятчилиги, экспорт ва импорт шартномаларни расмийлаштириш;

- давлат харидларида иштирок этиш, шунингдек, ер участкалари ва бино-иншоотларни сотиб олиш ёки ижарага олиш ва лойиҳалаштириш;

- тадбиркорликни қўллаб-қувватлаш бўйича амалдаги имтиёз ва преференциялар, мавжуд бошқа енгилликлар ва имкониятлар бўйича маълумот ва маслаҳатлар бериш ишлари амалга оширади.

- Тадбиркорлик фаолиятини қўллаб-қувватлаш давлат жамғармаси Иқтисодиёт ва молия вазирлиги таъсисчилигида “Тадбиркорликни ривожлантириш компанияси” АЖ шаклида қайта ташкил қилинади.

2024 йил 1 мартдан жорий этилаётган молиявий ёрдамлар

Кафиллик ёрдами

Компания томонидан кафиллик хорижий ва миллий валютада ажратиладиган кредитлар учун ажратилади.

Кичик тадбиркорлик субъектлари ҳамда ўзини ўзи банд қилган шахсларга:

микромоллия ташкилотлари томонидан ажратиладиган кредитлар бўйича 100 миллион сўмдан ошмаган миқдорда, бироқ кредитнинг 30 фоизигача кафиллик тақдим этилади.

Кичик тадбиркорлик субъектларига:

тижорат банклари томонидан ажратиладиган кредитлар бўйича 2,5 миллиард сўмдан ошмаган миқдорда, бироқ кредитнинг 50 фоизигача лизинг компаниялари томонидан ажратиладиган лизинглар 800 миллион сўмдан ошмаган миқдорда, бироқ лизингнинг 30 фоизигача

Ўрта тадбиркорлик субъектларига:

тижорат банклари томонидан ажратиладиган кредитлар бўйича 5 миллиард сўмдан ошмаган миқдорда, бироқ кредитнинг 50 фоизигача лизинг компаниялари томонидан ажратиладиган лизинглар 1,5 миллиард сўмдан ошмаган миқдорда, бироқ лизингнинг 30 фоизигача

Хизматлар ипотекаси

24 ойдан ортиқ фаолият юритаётган ҳамда бир йил давомида камида 50 нафар кишини доимий иш билан таъминлаган ўрта тадбиркорлик субъектлари фойдаланиши мумкин. Кўчмас мулк ва асбоб ускуналарнинг 70 фоизи, бироқ 10 млрд. сўмдан ортиқ бўлмаган миқдорда ажратилади. Муддати етти йилгача муддатга ажратилади. Қарздорлик қолдиғига Марказий банкнинг асосий ставкасидан 4 фоизлик пункт юқори ставкада йиллик фоиз ҳисоблаш ёки бўлиб-бўлиб тўлаш мумкин.

Капиталга улуш киритиш

24 ойдан ортиқ фаолият юритаётган ҳамда бир йил давомида камида 50 нафар кишини доимий иш билан таъминлаган ўрта тадбиркорлик субъектлари олиши мумкин. Лойиҳа қийматининг 15 фоизи, бироқ устав капиталининг 20 фоизи ёки 3 млрд. сўмдан ортиқ бўлмаган миқдорда ажратилида. Муддати етти йилгача муддатга.

Компания ресурслари ҳисобидан кредит ажратиш

Бунда компания имтиёздан фойдаланиш учун тадбиркор мурожаат қилади ва банк тадбиркор талаби бўйича компаниядан ресурс жалб қилади.

Компания томонидан тижорат банклари, лизинг компаниялари ва микромолия ташкилотларига:

миллий валютада ажратиладиган кредит лар бўйича ресурс Марказий банкнинг асосий ставкасидан паст бўлмаган ставкада хорижий валютада ажратиладиган кредитлар бўйича ресурс Кузатув кенгаши томонидан белгиланган ставкада жойлаштиради.

Тижорат банкларининг маржаси кўшилган ставкада 7 йил муддатгача, 1,5 млрд. сўмгача кичик тадбиркорлик субъектларига, 5 млрд. сўмгача ўрта тадбиркорлик субъектларига кредит ажратади.

Лизинг компанияларининг маржаси кўшилган ставкада 5 йил муддатгача 500 млн. сўмгача кичик тадбиркорлик субъектларига 1 млрд. сўмгача ўрта тадбиркорлик субъектларига лизинг ажратади.

Микромолия ташкилотларининг маржаси кўшилган ставкада 3 йил муддатгача 300 млн. сўмгача кичик тадбиркорлик субъектлари ҳамда ўзини ўзи банд қилган шахсларга кредит ажратади.

Компания томонидан лизинг компаниялари ва микромолия ташкилотларига жойлаштирилган ресурс ҳисобига ажратиладиган кредит лар учун Компаниянинг бошқа молиявий ёрдами кўрсатилмайди.

Компенсация

Компенсация давлат томонидан бериладиган беғараз ёрдамдир. 3 йилдан ортиқ бўлмаган муддатга компенсация “1+2” тамойили асосида аввал кредитнинг дастлабки йилига тақдим этилади, кейинги икки йил давомида қуйидагиларга асосан давом эттирилади, яъни янги иш ўринларини яратиш режаси бажарилиши ва йиллик реализация қилинган маҳсулот (хизмат) бўйича тушумнинг камида 15 фоизга ошиши ҳисобига.

кичик тадбиркорлик субъектларига 18 фоиздан юқори лекин 24,5 фоиздан кўп бўлмаган миллий валютада 5 млрд. сўмгача ажратиладиган кредитлар бўйича асосий ставкаси 40 фоизгача миқдорда (5,6 фоизи) уч йилдан ортиқ бўлмаган муддатга компенсация тақдим этилади.

фаолият даври уч йилгача бўлган кичик тадбиркорлик субъектларига 3 млрд. сўм кредитлари учун тақдим этилади.

компания кузатув кенгашининг қарорига асосан ташкил этилган давридан қатъий назар кичик тадбиркорлик субъектларига 5 млрд. сўм кредитлари учун тақдим этилади

Компаниянинг молиявий ёрдамидан фойдаланишда тадбиркор қуйидаги талабларга жавоб бериши керак.

компенсация олишда жорий кредитлар ёки бюджетга тўловлар бўйича муддати ўтган қарздорлиги мавжуд эмаслиги;

кафиллик олишда Ўзбекистон Республикаси ҳудудида рўйхатдан ўтган ва фаолиятини амалга ошираётган, тугатилиш босқичида бўлмаган, жорий кредит ёки бюджетга тўловлар бўйича муддати ўтказиб юборилган қарздорлиги бўлмаган ҳамда уларга нисбатан банкротлик тартиботи қўзғатилмаган бўлиши лозим.

кафиллик пулли хизмат ҳисобланади ва 1 фоиз бир марталик тўлов ундирилади.

2024-2026 йилларда қуйидаги мақсадли кўрсаткичларга эришишга қаратилган микромолиявий хизматлар оммабоплигини ошириш дастури амалга оширилади.

- микромолиялаш бозори ҳажмини камида 5 баробарга ошириш;
- микромолиявий хизматлар билан 1 миллиондан ортиқ тадбиркорларни қамраб олиш;
- микромолия ташкилотлари ресурс базасида жисмоний шахслардан жалб қилинадиган маблағлар миқдорини 2 баробарга ошириш;
- микромолиявий хизматлар кўрсатиш орқали расмий даромадга эга бўлмаган 500 мингга яқин шахсларни ўзини ўзи банд қилиш ва бизнесни ривожлантиришга кўмаклашиш.

Хулоса ўрнида айтиш мумкинки, бозор иқтисодиёти шароитида бўлса ҳам, кўринмас қўллар ва ҳуқуқий-сиёсий асослар билан тадбиркорлик субъектларини давлат томонидан қўллаб-қувватлаш механизмини ишлаб чиқиш зарурияти доимо сақланиб қолган.

Шу сабабли, доимий равишда тадбиркорлик субъектларини давлат томонидан қўллаб қувватланиши бугунги кундаги ислоҳотларнинг амалга оширилишида катта таъсирини ўтказди.

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Болтаева Ш.О.
преподаватель
Термезский государственный университет

РАЗВИТИЕ ПРОФЕССИОНАЛЬНЫХ КОМПЕТЕНЦИЙ ПО НАПРАВЛЕНИЯМ ГУМАНИТАРНОГО ОБРАЗОВАНИЯ ЧЕРЕЗ ПРЕДМЕТ ЭЛЕМЕНТЫ ТЕОРИИ ВЕРОЯТНОСТЕЙ

Аннотация. В данной статье рассматриваются особенности теоретического подхода к теме элементов теории вероятностей и развития профессиональных компетенций в процессе преподавания математики на факультетах гуманитарного образования высших учебных заведений.

Ключевые слова: гуманитарность, компетентность, опыт, случайность, комбинаторика, проблема, элемент, комбинация, перестановка, множество, расположение, группировка.

Boltayeva Sh.O.
lecturer
Termez State University

DEVELOPMENT OF PROFESSIONAL COMPETENCIES IN THE FIELDS OF HUMANITIES EDUCATION THROUGH THE SUBJECT ELEMENTS OF PROBABILITY THEORY

Annotation. This article examines the features of the theoretical approach to the topic of elements of probability theory and the development of professional competencies in the process of teaching mathematics at the faculties of humanities education of higher educational institutions.

Key words: humanitarian, competence, experience, chance, combinatorics, problem, element, combination, permutation, set, arrangement, grouping.

В нашей стране особое внимание уделяется организации эффективного образовательного процесса на основе современных требований, в том числе применению информационных технологий в системе общего среднего образования, организации инновационного образования в высших учебных заведениях. В постановлениях от 8 октября 2019 года № ПФ-5847 Об утверждении “Концепции развития системы высшего образования Республики Узбекистан до 2030 года” и от 7 мая 2020 года № ПП-4708 “О мерах по повышению качества образования и развитию научных исследований в области математики” были признаны вопросы достижения качества и эффективности образования и приняты основные

внимание уделяется организации инновационного образования с опорой на зарубежные технологии [1,2].

Модернизация системы образования, изменения, происходящие в системе профессионального образования, создают необходимость развития профессиональной компетентности работников образовательного учреждения. В настоящее время в системе высшего образования внедряются государственные образовательные стандарты, широко внедряются инновации в содержание и технологии образования, направленные на повышение качества подготовки будущих специалистов.

Компетенция-это английское понятие” компетенция“, которое в словарном смысле буквально означает” способность“. А по содержанию означает” умение использовать теоретические знания в деятельности, проявлять высокий уровень профессиональной компетентности, умения и таланты“. Образование, направленное на формирование компетенций в образовательном процессе, – это возможность обучающихся практически применять полученные знания, умения и навыки в своей личной, профессиональной и общественной деятельности. Обучение, основанное на компетентностном подходе, развивает у учащихся самостоятельность, активную гражданскую позицию, инициативу, умение рационально использовать медиаресурсы и информационные и коммуникационные технологии в своей деятельности, осознанный выбор профессии, здоровую конкуренцию, а также общекультурные навыки [5].

Человек должен обладать базовыми компетенциями, необходимыми для того, чтобы вступать в личные, социальные, экономические и профессиональные отношения в своей жизни, занимать свое место в обществе, решать стоящие перед ним проблемы, а главное, быть конкурентоспособным в своей области, профессии. Кроме того, в процессе освоения каждой учебной дисциплины в образовании у учащихся формируются и специфические компетенции, относящиеся к отрасли, обусловленные спецификой, содержанием данной дисциплины.

В направлениях гуманитарного образования развиваются следующие компетенции по математике: предмет и этапы развития, исторический прогресс математической науки; логическое рассуждение и математическое наблюдение, правильное умозаключение, обеспечение преемственности и преемственности последовательности предметов; в то время как основные концепции аналитической геометрии заключаются в том, что они могут визуализировать исходную форму исторических памятников и находок, концепция функции заключается в росте населения, построении демографических моделей, построении диаграмм рождений, смертей, браков и разводов, приведении моделей постоянного и постоянного населения; в проведении исторических открытий и археологических раскопок посредством приложений точного интеграла поверхность плоской фигуры геометрической формы, выполненная работа, работа, выполненная

при подъеме груза, расчет прочности на сжатие жидкости; теория вероятностей реализация исторического анализа с помощью математической статистики [5].

Теория вероятностей-математическая наука, изучающая закономерности” случайных экспериментов”, то есть экспериментов, результат которых непредсказуем. При этом рассматриваются такие эксперименты, которые, как считается, могут быть воспроизведены в неизменном (т. е. идентичном) комплексе условий, по крайней мере, теоретически, в произвольном количестве. Результатом каждого из таких экспериментов является случайное событие. Практически во всех сферах человеческой деятельности бывают случаи, когда те или иные опыты можно будет повторять в одних и тех же условиях многократно. Теория вероятностей заинтересована в экспериментах, результаты которых различаются при переходе от теста к тесту. События, которые невозможно предсказать, произойдут они в эксперименте или нет, называются случайными событиями. Например, в эксперименте с подбрасыванием монеты каждому подбрасыванию соответствуют два случайных события: выпадение гербовой стороны монеты или выпадение числовой стороны монеты [3].

Теория вероятностей, в отличие от других математических дисциплин, имеет относительно короткую, но чрезвычайно амбициозную историю развития. Теперь приведем краткую историческую информацию. Систематическое изучение задач, соответствующих массовым случайным явлениям, и появление соответствующего им математического аппарата относится к XVII веку. В начале семнадцатого века знаменитый физик Галилей попытался провести научное исследование ошибок физических измерений, считая их случайными. В эти периоды также были попытки создать общую теорию страхования, основанную на анализе закономерностей заболеваемости, смертности, статистики несчастных случаев и подобных массовых случайных событий. Однако теория вероятностей как математическая наука стала возникать не из изучения сложных случайных процессов, а из анализа простейших азартных игр. Поэтому возникновение теории вероятностей соответствует второй половине семнадцатого века и связано с исследованиями в теории азартных игр таких ученых, как Паскаль (1623-1662), ферма (1601-1665) и Гюйгенс (1629-1695). Большой шаг в развитии теории вероятностей связан с научными исследованиями Якова Бернулли (1654-1705). Ему принадлежит “закон больших чисел”, который считается важнейшим законом теории вероятностей. Еще один важный шаг в развитии теории вероятностей связан с именем де Муавра (1667-1754). Это было наивно обосновано ученым тем, что существует важный закон, называемый нормальным законом (или нормальным распределением). Позже выяснилось, что эта закономерность также играет важную роль в теории вероятностей. Теоремы,

обосновывающие существование этого закона, называются “центральными предельными теоремами”. Большой вклад в развитие теории вероятностей принадлежит и знаменитому математику Лапласу (1749-1827). Он был первым, кто строго и систематически описал основы теории вероятностей, доказал форму центральной предельной теоремы (теорема Муавра-Лапласа) и привел несколько приложений теории вероятностей. Достаточный прогресс в развитии теории вероятностей связан с именем Гаусса (1777-1855). Он дал более общее обоснование нормальному закону и создал важный метод обработки числовых данных из опыта – “метод малых квадратов”. Пуассон (1781-1840) обобщил закон больших чисел и применил теорию вероятностей к задачам стрельбы. Его именем назван закон распределения, играющий большую роль в теории вероятностей. Для XVII и XIX веков характерно резкое развитие теории вероятностей и всесторонний интерес к ней. Дальнейшее развитие теории вероятностей внесли российские ученые В.У. Буняковский (1804-1889), П.Л. Чебышев (1821-1894), А.А. Марков (1856-1922), А.М. Ляпунов (1857-1918), А.У. Хинчин (1894-1959), В.И. Романовский (1879-1954), А.Н. Колмогоров (1903-1987) и их ученики внесли неоценимый вклад. В Узбекистане всемирно известны Саримсоков (1915-1995) и С.Х. Отдельно стоит отметить важную роль творчества сирожиддинова (1920-1988) [3].

Термин "вероятность" представляет собой объективную меру вероятности возникновения события.

В результате эксперимента на бедре e_1, e_2, \dots, e_n может произойти любое из элементарных событий, т.е. $U = \{e_1, e_2, \dots, e_n\}$ будь как будет.

Bu elementar hodisalarga quyidagi shartlarni qo'yamiz:

На эти элементарные события наложим следующие условия:

1) события не объединяются в пары, иными словами, для любых двух e_i и e_j ($i \neq j$) событий, если одно из них произойдет, другое заведомо не произойдет.

2) e_1, e_2, \dots, e_n события единственно возможные события, то есть одно из них должно произойти.

3) e_1, e_2, \dots, e_n события одинаково вероятны. Это обязательно e_1, e_2, \dots, e_n означает, что не существует объективных причин, которые способствовали бы одному из событий случиться больше, чем другим.

Предположим, что событие учитывая, что e_i ($i = \overline{1, n}$) пусть Рой дает только тогда, когда рой дает некоторые из элементарных событий. В этом случае мы e_i ($i = \overline{1, n}$) те из элементарных событий, которые дают гоу, а также те, которые приводят к тому, что событие дает Роу, мы называем событиями, для которых событие создает удобство.

Допустим, рассматриваемый n e_1, e_2, \dots, e_n Пусть m одно из элементарных событий способствует наступлению события А, т.е.

$A = (e_{k_1}, e_{k_2}, \dots, e_{k_m})$ будь как будет

Классическое определение вероятности. Вероятность события A определяется как отношение числа событий, способствующих наступлению события A , к числу элементарных событий с равной вероятностью и определяется следующим образом:

$$P(A) = \frac{m}{n} = \frac{A \text{ ga kirgan elementar hodisalar soni}}{\text{barcha elementar hodisalar soni}}$$

Количество всех группировок (комбинаций) m из n элементов

$$C_n^m = \frac{n!}{m!(n-m)!} = \frac{n(n-1)\dots[n-(m-1)]}{m!}$$

находится по формуле.

Пример. В коллективе из 25 человек четверо должны быть выделены для работы на определенном участке. Сколькими способами это можно сделать?

Решение. Поскольку выбранные 4 человека не важны, ему C_{25}^4 можно сделать следующим образом:

$$C_{25}^4 = \frac{25!}{(25-4)!4!} = \frac{25!}{21!4!} = \frac{21! \cdot 22 \cdot 23 \cdot 24 \cdot 25}{21! \cdot 1 \cdot 2 \cdot 3 \cdot 4} = 12650$$

В этом

$$C_n^k = \frac{A_n^k}{k!}$$

быть,

$$A_n^k = \frac{n!}{(n-k)!}$$

Ответ: Это можно сделать 12650 способами.

Пример. Сколькими способами можно разместить на одной полке шесть разных книг?

Решение. Фактически первую книгу можно выбрать шестью способами, вторую пятью способами и аналогично последнюю книгу одним способом. По правилу умножения общее количество методов равно:

$$P_6 = 6! = 1 \cdot 2 \cdot 3 \cdot 4 \cdot 5 \cdot 6 = 720$$

Ответ: Его можно разместить 720 способами.

Пример. Есть 5 видов конвертов без марок и 4 вида марок. Сколькими способами можно выбрать конверт и марку для отправки письма?

Ответ: 20.

Пример. Из 9 человек вам предстоит выбрать 4 человека и разместить их на четырех пронумерованных стульях (по 1 человеку на стул). Сколькими способами это можно сделать?

Решение. Решение задачи вычисляется путем нахождения количества перестановок элементов.

$$A_9^4 = \frac{9!}{(9-4)!} = \frac{9!}{5!} = 6 \cdot 7 \cdot 8 \cdot 9 = 3024$$

Ответ: 3024.

Пример. Если имеется 7 бегунов, сколькими способами можно сформировать команду из 4 человек для участия в забеге?

Решение. Это решение проблемы n из элементов m количество группировок, составленных из C_n^m найдено через.

$$C_7^4 = \frac{7!}{4!(7-4)!} = \frac{7!}{3! \cdot 4!} = \frac{5 \cdot 6 \cdot 7}{1 \cdot 2 \cdot 3} = 35.$$

Ответ: 35.

Пример. Сколько способов можно покрыть 6 стульев тканью, если есть ткани 6 разных цветов и все стулья должны быть разных цветов?

Решение. Сколько способов можно покрыть 6 стульев тканью количество перестановок $P_n = n!$ находится по формуле.

$$P_6 = 6! = 1 \cdot 2 \cdot 3 \cdot 4 \cdot 5 \cdot 6 = 720.$$

Ответ: 720.

Чтобы закрепить пройденную тему, уровень знаний учащихся контролируется с помощью вопросов” блиц”.

” Блиц ” вопросы.

Что называется задачами комбинаторики?	Задачи, связанные с нахождением различных комбинаций элементов и их количества, называются задачами комбинаторики.
Что такое замена?	Комбинации n различных элементов, отличающиеся друг от друга только расположением.
Как найти количество перестановок?	n количество всех перестановок, состоящих из элементов $P_n = n!$ находится по формуле
Что такое упорядоченный набор?	Множество, элементы которого расположены в заданном порядке, называется упорядоченным множеством.
Что такое размещение?	n представляют собой комбинации различных элементов, m которые отличаются друг от друга составом элементов или их порядком.
Как найти количество перестановок n из m разных элементов?	n из элемента m количество размещений от A_n^m находится по формуле $A_n^m = \frac{n!}{(n-m)!}$
Что такое группировка?	Они представляют собой комбинации n элементов, m отличающиеся друг от друга хотя бы одним элементом.
Как найти количество группировок?	n из элемента m количество группировок, состоящих из C_n^m найден через

$C_n^m = \frac{n!}{m!(n-m)!}$

Упражнения для укрепления.

1. Если: 1) $A = \{1\}$; 2) $A = \{5; 6\}$; 3) $A = \{a; b; c\}$ найти все возможные перестановки элементов заданных множеств.
2. $A = \{a; b; c; d\}$ найти возможные перестановки элементов множества.
3. Сколько элементов должно быть максимум в этом наборе, чтобы количество всех перестановок, составленных из элементов набора, не превышало 100?
4. Найдите количество мест: 1) A_{15}^3 ; 2) A_{m-1}^{m-5} .
5. Найдите количество группировок ниже: 1) C_{51}^{13} ; 2) C_6^4 .
6. Сколько разных способов можно отправить на научную конференцию 4 студента из 12 специальностей по истории и 15 специальностей по археологии?

В инновационном образовании такие технологии, как нестандартные тесты, творческие упражнения и проблемные видеоповторы, которые выявляют и развивают математические компетенции, служат для закрепления знаний об изучаемом материале, формирования навыков анализа задач, принятия оптимальных решений по самостоятельному решению задач, формирования и развития ответственности, самостоятельности и предметных компетенций.

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*Васильева А.А.
студент*

*ФГБОУ ВО «Технологический университет имени дважды Героя
Советского Союза, летчика-космонавта А.А. Леонова»*

*Научный руководитель: Голубев А.Ф.
доцент*

кафедра управления

*ФГБОУ ВО «Технологический университет имени дважды Героя
Советского Союза, летчика-космонавта А.А. Леонова»*

Российская Федерация, Московская область, г.Королёв

СОВЕРШЕНСТВОВАНИЕ НОРМАТИВНО-ПРАВОВЫХ ОСНОВ ТАМОЖЕННОГО ДЕКЛАРИРОВАНИЯ ТОВАРОВ И ТРАНСПОРТНЫХ СРЕДСТВ

Аннотация. В статье рассматриваются проблемы правовых основ, регулирующих процесс декларирования товаров и транспортных средств в Российской Федерации. Большое внимание отведено законодательной стороне вопроса выполнения данной таможенной операции, определена нормативная и правовая база. В ходе исследования проанализировано текущее состояние нормативно-правовой базы таможенных органов, рассмотрен процесс декларирования товаров и транспортных средств. В завершение определены пути совершенствования законодательства в области декларирования товаров и транспортных средств в РФ.

Ключевые слова: декларирование, таможенный орган, правонарушение, таможенный контроль.

*Vasileva A.A.
student*

*Federal State Budgetary Educational Institution of Higher Education
«Technological University named after twice Hero of the Soviet Union, pilot-
cosmonaut A.A. Leonov»*

*Scientific supervisor: Golubev A.F.
associate professor*

Department of Management

*Federal State Budgetary Educational Institution of Higher Education
«Technological University named after twice Hero of the Soviet Union, pilot-
cosmonaut A.A. Leonov»*

Russian Federation, Moscow region, Korolev

IMPROVING THE REGULATORY FRAMEWORK FOR CUSTOMS DECLARATION OF GOODS AND VEHICLES

Abstract. The article deals with the problems of the legal framework governing the process of declaring goods in the Russian Federation. Much attention is paid to the legislative side of the issue of performing this customs operation, the regulatory and legal framework is defined. In the course of the study, the current state of the regulatory framework of the customs authorities was analyzed, the process of declaring goods was considered. In conclusion, the ways of improving legislation in the field of non-declaration and incorrect declaration of goods in the Russian Federation are identified.

Key words: declaration, customs authority, offense, customs control.

Декларирование как совокупность в процессе таможенного оформления товаров определена как один из главенствующих условий, выполнение которых требуется при пересечении товарами границ ЕАЭС. Исходя из данных, которые таможенник или его представитель указывает в таможенной декларации на товары, органы таможни определяют возможность пересечения таким товаром границы ЕАЭС, возможность выпуска этих товаров на территории ЕАЭС, можно сказать, дают возможность использовать эти товары лицам, которые в этом заинтересованы, ориентируясь на выбранный таможенный режим. Недекларирование или неверное декларирование товаров изначально создает неверный фактор работы с этими товарами со всеми вытекающими из этого последствиями. Объективную сторону декларирования, недекларирования или неверного декларирования товаров представляют товары и транспортные средства, перемещающиеся по всей территории ЕАЭС. В современных экономических условиях между странами отлично практикуется научное и техническое сотрудничество, что, в свою очередь, способствует ускоренному росту мировой торговли. В то же время рынок наполняется новейшими товарами, которые становятся все больше технически сложными и наукоёмкими, а покупатели становятся более внимательными относительно качества таких товаров [4, стр. 163]. Также, увеличение ассортимента товаров, перемещаемых через таможенные границы ЕАЭС, вносит сложности и в грамотное декларирование товаров. Так, декларирование товаров, относящихся к транспортным средствам необходимо декларировать, опираясь на 22 главу Таможенного кодекса ЕАЭС, исключая другие возможные нормативно-правовые акты. Декларирование товаров применяется для выполнения следующих задач:

- передача органам таможни основных данных, которые потребуются им для выполнения необходимых требований, о товарах, которые в дальнейшем планируется перемещать через таможенные границы ЕАЭС;
- гарантия отправления товаров в том, что все действия, которые совершает декларант с товарами, легитимны относительно действующего законодательства;

– начисление и требование о выплате таможенных платежей, начисленных, основываясь на указанные в декларации, данные о товарах, перемещаемых через таможенную границу ЕАЭС [1].

При своевременном определении, остановке и пресечении нарушений, касающихся таможенной процедуры декларирования товаров и транспортных средств, при выявлении нарушений в заполненных на товары декларациях, появляется возможность остановки выпуска таких товаров, следовательно, появляется возможность избежать появления на рынке контрафактных товаров. Также, своевременное определение фактов недекларирования или неверного декларирования товаров и транспортных средств позволяет начислить точное количество таможенных платежей, что, в свою очередь, необходимо для избегания финансовых потерь всего государства. Контроль, позволяющий пресекать вовремя такие виды правонарушений, определяется качественными правовыми основами государственного законодательства. Именно полагаясь на нормативно-правовую базу, таможенные органы проводят контроль в отношении товаров и транспортных средств, пересекающих границы ЕАЭС. Так, грамотно составленные правовые акты в области недекларирования или неверного декларирования товаров и транспортных средств сохраняют не только финансовую стабильность Российской Федерации, но и гарантируют защиту экономических интересов Российской Федерации в условиях ее членства в ЕАЭС. Исходя из статистических данных, в Российской Федерации виден стабильный рост количества дел о правонарушениях касательно недекларирования или неверного декларирования товаров и транспортных средств [5, стр. 138]. Данный факт демонстрирует то, что в Российской Федерации недостаточно полно применяется превентивная функция административного законодательства, касающегося нарушений в области таможенного права, в особенности таможенного контроля товаров и транспортных средств, ошибок их таможенного декларирования или недекларирования. В связи с этим, на сегодняшний день, тема данной статьи актуальна.

Результатами декларирования товаров являются данные о товаре, которые используются не только органами таможни, но и органами налоговых служб, правоохрнительными органами для собственного регулирования внутренней экономической деятельности и внешней экономической деятельности, а также для грамотного ведения и заполнения статистических данных [6, стр. 113]. В случае, когда декларант неверно заполняет декларацию на товары или вообще не заполняет деклараций на свои товары, многие административные органы остаются в заблуждении. От этого, в большинстве своем, страдают экономическая сфера государства, а также рыночная сфера: налоги начисляются неверно, в связи с тем, денежных средств, поступающих в бюджет государства, становится меньше; статистика ведется неверно – спрос и предложение на внутреннем

рынке определяются неверно. Самая важная сфера, в которой важна система декларирования товаров и транспортных средств – сфера таможенно-тарифного регулирования внешнеэкономической деятельности [7, стр. 76].

В тот же момент, основными причинами, по которым действующее законодательство в области недекларирования или неверного декларирования товаров и транспортных средств работает недостаточно эффективно, являются уже накопившиеся проблемные моменты в правовых основах, касающихся данной таможенной процедуры. В большинстве своем, такие проблемы присутствуют на стадиях возбуждения и рассмотрения дел об административных правонарушениях [2]. Также, на основе проведенного анализа, были выявлены проблематичные моменты, как и в правовых основах общего порядка, так и в области декларирования товаров, недостаточно контролируемых законодательством государством. Чтобы их исправить, потребуется вносить изменения, как в общее законодательство, так и в таможенное законодательство. В процессе исследования определено, что в статистике из всех дел об административных правонарушениях, которые возбуждались органами таможенной власти, а после закрывались по различным причинам, более тридцати процентов таких дел составляли дела, касающиеся декларирования товаров и транспортных средств. В основном такие дела были закрыты до вынесения приговора правонарушителю. Чаще всего такие ситуации происходили по причине того, что во время процесса разбора правонарушения было определено отсутствие состава или события административного правонарушения. Так, более тридцати процентов дел были прекращены, никакого наказания вынесено не было. Это наглядно демонстрирует недостаточное качество в правовых основах в области контроля декларирования товаров и транспортных средств, пересекающих границы ЕАЭС [3, стр. 113]. Всего, в судебной практике выявляется несколько причин, по которым декларант освобождался от ответственности. Таковыми являются:

- примечание к статье 16.2 кодекса ЕАЭС;
- отсутствие события правонарушения. К примеру, известны случаи, когда декларант не отражал некоторую коммерческую информацию в декларации, но, согласно документам производителя, данная информация должна была быть отражена. В таких случаях суд требует дополнительно предоставить информацию, но вопрос злоумышленного сокрытия ее декларантом остается открытым. В правовых актах недостаточно четко указано то, что в декларации должна быть представлена абсолютно вся информация, а в иных случаях требуется признавать это недостоверным декларированием;
- сложности в отношении постановления пленума №79, в котором недостаточно грамотно трактуются правила касательно декларантов на товары, одновременно являющихся представителями этих товаров;

– определение правонарушения недекларирования или недостоверного декларирования товара как малозначительного правонарушения;

– отсутствие состава правонарушения.

В основном, рассмотренные выше проблемы в правовых основах характеризуются противоречивостью среди областей правового регулирования, а также неполноценной определенностью норм административного права. Кроме этого, необходимо упомянуть и о том, что недостаточно развит порядок применения правовых основ, что обуславливает довольно формальный подход в правовом производстве, касающемся определения наказания за нарушение в области недостоверного декларирования товаров и транспортных средств, или совсем отсутствия деклараций на них. Довольно часто не уделяется большое внимание выяснению обстоятельств дела, важных для состава правонарушения. Так, в дальнейшем, в отношении владельца товара практически необоснованно выносятся обвинения, либо наоборот, что практически полностью искореняет возможность использования права на защиту, которое есть у всех. В связи с этим, можно сделать вывод, что проблема недостаточно полного рассмотрения дел, недостаточно полные требования о рассмотрении дел в действующих правовых основах – вопрос, требующий корректировки. Основу нормативно-правовой базы декларирования товаров и транспортных средств определяет статья 16.2 Таможенного кодекса ЕАЭС, однако, при определении такого правонарушения, правоохранительные органы ориентируются и на административное законодательство РФ [1]

В ходе исследования были определены основные проблемные моменты в правовых основах, касающихся декларирования товаров и транспортных средств, а также определены возможные пути совершенствования. Так, была определена несогласованность среди правовых актов Министерства Российской Федерации и Законодательством ЕАЭС. Это вносит разногласия в определение фактов недостоверного декларирования товаров, а также затрудняет работу органов таможни. Правовые основы касательно всех вопросов среди государства РФ и ЕАЭС должны быть согласованы и едины.

Также, довольно часто сложно истолковать правовые основы для декларанта, в связи с чем, декларант может нарушить правила, даже не подозревая этого. В связи с этим, для упрощения действий декларанта в момент оформления своих товаров, требуется упростить толкование правовых актов, либо создать определенный перечень, который будет разъяснять все декларанту.

Анализируя нормативно-правовую базу, касающуюся декларирования товаров и транспортных средств, были выявлены определенные сложности и с определением перечня товаров, которые

должны быть обязательно задекларированы. Так, появляются случаи недостоверного истолкования пункта в Таможенном кодексе ЕАЭС относительно того, какие товары отражать в декларации. Чтобы сгладить этот проблемный вопрос необходимо составить более уточняющую формулировку в Таможенном кодексе ЕАЭС.

Требуется рассмотреть еще один проблемный вопрос. Недостаточное уточнение среди определения момента недеklarирования и неверного декларирования. В законодательстве, на сегодняшний день, возникает большое количество спорных вопросов, касательно этого момента. В случае, если декларант неправильно указывает в декларации, часто определяют правонарушение не как «недостоверное декларирование», а как «недекларирования». В таком случае декларант облагается штрафными санкциями и лишается возможности выпускать товар, что несет еще большие потери для декларанта. Кроме этого, из-за недостаточных формулировок ошибаются и таможенные органы, и суды, и органы правоохранительной власти. В тот же момент, когда декларант решает бороться за свои права и доказывать свою правоту, декларанту приходится пройти огромное количество инстанций.

Конечно, в данной статье рассмотрены не все проблемы в правовых основах декларирования товаров и транспортных средств, есть много недостоверных и неточных формулировок и толкований. Пути совершенствования, рассмотренные в работе, требуют еще более глубокой доработки и корректировки, здесь отмечены лишь некоторые из них. Предложенные пути совершенствования правовых основ и возможности их дополнения не сменяют правила и практические формы применения их, а лишь сделают их более уточняющими и понятными для участников правоохранительной деятельности и участников внешнеэкономической деятельности. Это позволит упростить таможенное оформление товаров, сократить время, затрачиваемое на это. Также, поправки помогут сократить количество нерешенных правонарушений в области декларирования товаров и транспортных средств, что сократит потери из бюджета Российской Федерации.

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Гаппаров Б.Н.
старший преподаватель
Джизакский политехнический институт
Колмогоров Д.Е., к.т.н.
директор
Институт международных связей и интернационализации
образования
ТГАСУ

ПЕРСОНАЛИЗИРОВАННЫЕ СПОСОБЫ ОБУЧЕНИЯ ПРИ ИЗУЧЕНИИ ГЕОЛОГИЧЕСКИХ ПРОЦЕССОВ В ОБЩЕСТВЕ

Аннотация. В статье рассматривается концепция персонализированных образовательных методов изучения геологических процессов и подчеркивается важность специального инновационного подхода в образовательной практике. А также рассматриваются основы персонализированного образования и его значение в повышении эффективности образовательного процесса в области геологии. Затем автор обрисовывает основные образовательные цели, которые могут варьироваться от минералогии до гидрогеологии, и предлагает способы адаптации учебной программы, включив в нее как теоретические, так и практические аспекты.

Ключевые слова: геология, горное дело, персонализированное образование, минералогия, полезные ископаемые, учебная программа, 3D-моделирование, искусственный интеллект.

Gapparov B.N.
senior lecturer
Jizzakh Polytechnic Institute
Kolmogorov D.E., Ph.D.
director
Institute of International Relations and Internationalization of
Education
TGASU

PERSONALIZED METHODS OF TEACHING WHEN STUDYING GEOLOGICAL PROCESSES IN SOCIETY

Annotation. The article discusses the concept of personalized educational methods for studying geological processes and emphasizes the importance of a special innovative approach in educational practice. The article discusses the basics of personalized education and its importance in increasing the efficiency of the educational process in the field of geology. The author then outlines the

main educational objectives, which can range from mineralogy to hydrogeology, and suggests ways to adapt the curriculum to include both theoretical and practical aspects.

Key words: geology, mining, personalized education, mineralogy, minerals, curriculum, 3D modeling, artificial intelligence.

Геология – естественная наука, изучающая состав, строение и историю Земли, а также процессы, приводящие к ее изменению. Изучение геологии важно для самых разных профессий: от строительства и горнодобывающей промышленности до экологии и экологического планирования. В последние годы образование стало более персонализированным благодаря развитию технологий, что позволяет учащимся создавать персонализированные траектории обучения, соответствующие их интересам и целям.

В этой статье мы рассмотрим, как можно разработать персонализированные пути обучения для изучения геологических процессов. **1. Доступ к персонализированным программам обучения.**

Персонализированное образование предполагает адаптацию методов обучения, учебной программы и учебных материалов к индивидуальным потребностям учащихся. Это включает в себя учет их предшествующих знаний, интересов, стиля обучения и скорости обучения. В геологии, где темы могут варьироваться от минералогии до тектоники плит, персонализация помогает сделать обучение более актуальным и эффективным для каждого учащегося.

2. Определение образовательных целей.

Первым шагом в создании индивидуального пути обучения является определение конкретных целей обучения. Студентов могут заинтересовать следующие аспекты геологии:

- исследование минералов и горных пород;
- понимание истории и стратиграфии Земли;
- изучение палеонтологии и древних организмов [1];
- прогнозирование и изучение землетрясений и вулканов;
- изучение водных ресурсов и гидрогеологии;
- поиск полезных ископаемых.

3. Создать учебную программу.

После того как цели обучения определены, учебная программа может включать необходимые темы в зависимости от уровня сложности, подходящего для учащегося. План может включать в себя:

- теоретические занятия;
- практическая лабораторная работа;
- полевые исследования;
- интерактивные онлайн-курсы;
- проектные работы;

- индивидуальный подход к обучению [2];
- использование технологий.

Современные образовательные технологии предлагают различные инструменты для персонализации процесса обучения. Цифровые учебники, учебные пособия на базе искусственного интеллекта, виртуальные лаборатории и 3D-моделирование позволяют учащимся узнавать о геологических процессах в интерактивном режиме.

4. Оценка уровня знаний.

Регулярные оценки помогают отслеживать прогресс учащихся и корректировать учебную программу по мере необходимости. Тесты, опросы и самооценка являются важными инструментами в этом процессе.

5. Гибкое образование.

Системы адаптивного обучения автоматически корректируют содержание и темп обучения в соответствии с индивидуальными достижениями и трудностями учащихся.

6. Практический опыт.

Для глубокого понимания геологических процессов необходимо сочетать теорию с практикой [3]. Участие в экскурсиях и реальных научных проектах дает студентам возможность наблюдать геологические процессы в действии и применять полученные знания.

Итак, персонализированное образование по геологии открывает перед студентами новые возможности. Они позволяют себе глубоко изучать землю и ее процессы, применять знания в реальных условиях, готовиться к будущей профессии в соответствии с индивидуальными интересами и потребностями. Современные технологии и подходы к образованию делают этот процесс более удобным и эффективным, открывая двери в мир геологии каждому.

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*Гаппаров Б.Н.
старший преподаватель
Джизакский политехнический институт
Песцов Д.Н.
директор
декан заочного факультета
Институт дистанционного образования ТГАСУ*

ВИДЫ КОМПЕТЕНТНЫХ ПОДХОДОВ К ОБЕСПЕЧЕНИЮ КАЧЕСТВА И СОДЕРЖАНИЯ ОБРАЗОВАНИЯ В ВУЗАХ

Аннотация. В данной статье представлена подробная информация о качестве образования в вузах сегодня, а также видах компетентных подходов к обеспечению его содержания.

Ключевые слова: непрерывное образование, педагогический процесс, образовательное учреждение, качество образования, нормативно-правовые документы, поиск информации, анализ, оценка, необходимая информация.

*Gapparov B.N.
senior teacher
Jizzakh Polytechnic Institute
Pestsov D.N.
director
dean of the correspondence faculty
Institute of Distance Education of TSASU*

TYPES OF COMPETENT APPROACHES TO PROVIDING THE QUALITY AND CONTENT OF EDUCATION IN HEI

Abstract. This article provides detailed information about the quality of education in HEIs today, and the types of competent approaches to ensuring its content.

Keywords: continuous education, pedagogical process, educational institution, quality of education, regulatory and legal documents, information search, analysis, evaluation, necessary information.

Государственные программы, направленные на развитие системы образования на основе комплексных реформ, реализуемых в системе непрерывного образования, совершенствования деятельности субъектов образовательного процесса, создания для них необходимых и достаточных условий, решений правительства, в высших учебных заведениях находят Решение существующих проблем, отказ от традиционных форм и методов

управления образовательной системой, требует формирования управленческой деятельности лидеров на основе демократических принципов и инновационных подходов.

Для организации и управления педагогическими процессами в образовательном учреждении на научной основе, создания комфортной образовательной среды в коллективе управленческий состав вуза должен знать и опираться на различные современные методы управления образовательной системой. уметь определять направление развития идей, необходимо регулярно изучать опыт и научно-технические достижения, применять их в своей деятельности, уметь организовывать инновационную деятельность в процессе управления.

По данным исследований, в процессе организации, управления и оценки качества образования руководители должны выполнять следующие особо важные задачи: предварительное планирование деятельности, выбор направлений реализации, принятие решений, которые необходимо выполнить; подбор специалистов по содержанию и сути задач и распределение выполняемых задач; организация образовательного процесса на научной основе, организация переподготовки и повышения квалификации педагогических кадров; обеспечение материально-технической и современной научно-методической продукцией; обеспечение непрерывной связи социальных связей образовательного учреждения; обеспечение использования передового педагогического опыта и современных информационных технологий; Реализация требований ДТС на практике и организация ее мониторинга; сбор и анализ информации на основе анкетирования и интервью среди ППС и студентов с целью определения тенденции и динамики развития образовательного учреждения; пересмотр и актуализация поставленных задач в направлении развития и совершенствования деятельности образовательного учреждения, подбора и расстановки кадров исходя из государственных требований к должностям; Руководитель должен направлять педагогический персонал на компетентную, целесообразную деятельность, обладающий четкой информацией, организующий инновационную деятельность на основе формирования и стимулирования заинтересованности подчиненных в результатах инновационной деятельности; контролировать исполнение решений и распоряжений. Также управленческий персонал высших учебных заведений должен обладать компетенцией в следующих областях.

Правовая компетентность - знание нормативно-правовых документов образования, правовых норм и умение эффективно использовать их в управленческой деятельности, разрабатывать локальные нормативно-правовые документы, принимать решения в рамках правовых норм.

Управленческая компетентность – методические методы, современные технологии управления, педагогико-психологические

диагностические (опрос, индивидуальное и групповое интервью) технологии, обеспечивающие эффективное решение управленческих проблем и задач, возникающих в реальных ситуациях управленческой деятельности, умение организовать эффективное управленческое общение и непрерывное совершенствование, создание здоровой психологической среды в коллективе, умение использовать эффективные методы в соответствии с управленческими ситуациями, умение использовать педагогические и психологические аспекты переговоров, тайм-менеджмент, формирование взаимоотношений с малыми группами и лидерами, совершенствование контроля в управлении.

Информационная компетентность – это поиск, анализ, оценка и направление необходимой информации, связанной с личной и управленческой деятельностью руководителя, с помощью современных информационно-коммуникационных технологий, организации самостоятельной творческой работы, постоянного развития управленческой деятельности.

Коммуникативная компетентность - обеспечение эффективного общения в процессе управления образованием, управление различными подгруппами с учетом их уникальности, организация эффективного управленческого общения в горизонтальном и вертикальном направлениях коммуникации, соблюдение этикета общения с иностранными партнерами, толерантности, иметь высокую речевую культуру в общении, формировать положительный имидж лидера в коллективе, уметь доносить письменные мысли в процессе общения, правильно выражать устные мысли в письменной форме, владеть манерой выступления перед коллективом, вести эффективные переговоры.

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*Давлатова Ф.А.
Ўсимликлар ҳимояси ва
карантини кафедраси ассистенти*

АРПА ДОН КУЯСИ ТУХУМИНИ АЖРАТУВЧИ МОСЛАМАНИ ТАКОМИЛЛАШТИРИШ

Аннотация. Ушбу мақолада дон куяси тухумини элаклардан ажратиб олиш учун тайёрланган мосламада иккитадан элакдаги тухумларни ажратиб олишда фойдаланилганда амалда 3-4 дақиқа вақт сарфланганда бўлиб, 45 та элакдан тухум олиш учун 67,5-90 дақиқа ёки андаза вариантига нисбатан кам вақт сарфланиши аниқланди.

Калит сўзлар: дон куяси, тухум, тангачалар, трихограмма, олтинкўз, вентилатор, патинус, банка ва трубка.

*Davlatova F.A.
assistant
Department of Plant Protection and Quarantine*

IMPROVEMENT OF DEVICE FOR SEPARATION OF BARLEY GRAIN MOTH EGGS

Annotation. This article found that when using a two-sieve egg separator, it takes 3-4 minutes to remove eggs from 45 sieves, or 67.5-90 minutes, or less time compared to the standard version.

Keywords: goldeneye, grain mole, eggs, scales, trichogramma, fan, jar, correta and tube.

Кўп йиллардан буён биологаторияларда трихограмма ва олтинкўз кўпайтириш учун дон куяси тухумидан фойдаланиб келинмоқда. Албатта бу ишлар ҳамма биологаторияларда оммалашган. Аммо юқорида таъкитлаб ўтилган жараён биологаторияларда бир хил эмас. Оддий биологаторияларда дон куясини кўпайтиришдан то тухум олиш жараёни ҳеч қандай тавсияларда берилмаган ҳолатда мосламаларсиз олиб борилади. Бу эса кўп вақтни сарфланишига ёки бир иш қунидаги берилган фойдали иш коэффициентини орқага сурилишига олиб келади. Бу эса трихограммани ва олтинкўзни озиклантиришни кечикишига олиб келади.

Ҳозирги кунда фанерли ёки темирли элаклардан фойдаланиш оммалашган бўлиб кўпроқ хонадан ташқарида дон қуяси элаб олинади. Бунга сабаб капалакларда ажралиб чиққан қанот тангачаларини ташқарига чиқаришни иложи йўқлигидир. Юқоридаги камчиликларни бартараф этиш



учун Олтинкўл тумани ўсимликлар карантини ва ҳимояси ИТИ ходимлари томонидан дон қуяси тухумини элаклар ёрдамида ажратиб олишда янги мослама яратишди (1-расм).

1-расм. Дон қуяси капалакларидан тухум олиш мосламасини умумий кўриниши.



2-расм. Капалаклар солинган элаклар ва аравагани умумий кўриниши

Дон қуяси тухумини ажратувчи мослама

Мослама баъзи бир қисмлари қурилиш материалдан, металл ва тунукадан тайёрланган бўлиб, ўлчами 600x50x20x20мм бўлган ғилдиракли аравача, диаметри 27x27 бўлган иккита элак (2-расм), дон қуяси тухумлари тўпланувчи патнус (каррета) (3-расм), ичкаридаги чанглари ташқарига чиқариб юборувчи вентилятор, чангни махсус йиғувчи банка ва трубкадан иборат.

Ичида капалаклар жойлашган иккита элак аравачага жойлаштирилади ва қўл ёрдамида чап ва ўнг томонга силкита, бошлайди ва элакдаги дон қуяси тухумлар пастга жойлашган патинусга туша бошлайди бу жараён

тухумлар тўлиқ тушиб бўлгунга қадар давом этади. Бу элаклар чиқариб олинади ва навбатдаги элаклар жойлаштирилади ва тухум олиш жараёни давом этади. Корпус бўйлаб тарқалага тарқалаган элакдаги капалаклардан ажралиб чиққан чанглар вентилятор ёрдамида труба орқали ичида сув қуйилган пластмасса идишга юборилади ва чанглар сувга чўкади, ҳаво эса махсус трубка орқали ташқарига чиқиб кетади.

1-жадвал.

Дон қуясини тухумини олиш учун кетган вақт (дақиқа ҳисобида)
Олтинқўл тумани ўсимликлар карантини ва ҳимояси (илмий марказий биологаторияси, 2024 й.16- март.)

№	Вариантлар	Элак-лар сони, дона	1 элак учун сарфланган вақт, дақиқа ҳисобида	Жами сарфланган вақт, дақиқа ҳисобида	Андазага нисбатан фарқи	
					+	-
1	Янги мослама	45	1,5-2	67,5-90	67,2-90	-
2	Андаза	45	3-4	135-180	-	67,2-90

Иш жараёнида битта элакдан ва махсус мослама ёрдамида тухум олиш учун 3-4 дақиқа сарфланади. Масус моламада 45 та элакдаги тухумни ажратиб олиш учун 67,5-90 дақиқа ёки 1,15соатдан 1,30 соатгача ва бир элакдан фойдаланилганда 135-180 дақиқа ёки 2,15 соатдан 3,0 соатгача вақт сарфланиши маълум бўлди.

Олиб борилган тажриба натижаларига кўра, янги тайёрланган мосламада ўртача 45 та элакдан тухум олинганда 1,1 соатдан 1,28 соатгача давом этиши маълум бўлиб, андазага варантига нисбатан 69 дан 92 дақиқагача кам вақт сарфланган.

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*Дадабаева Ф.З.
преподаватель
кафедры мировых языков и литератур
Государственный институт искусств и культуры Узбекистана*

МЕТОДИКА ПРЕПОДАВАНИЯ РУССКОГО ЯЗЫКА В НАЦИОНАЛЬНЫХ ГРУППАХ ИНСТИТУТА ИСКУССТВ И КУЛЬТУРЫ УЗБЕКИСТАНА

Аннотация. В данной статье рассматриваются вопросы преподавания и изучения русского языка в вузах не по лингволингвистическому направлению, а также по педагогическим технологиям.

Ключевые слова: язык, русский язык, педагогические технологии, кроссворд, ребус, современное образование.

*Dadabaeva F.Z.
lecturer
Department of World Languages and Literatures
State Institute of Arts and Culture of Uzbekistan*

METHODS OF TEACHING RUSSIAN LANGUAGE IN NATIONAL GROUPS OF THE INSTITUTE OF ARTS AND CULTURE OF UZBEKISTAN

Abstract. This article discusses the issues of teaching and learning the Russian language in universities not in the linguo-linguistic direction, but also in pedagogical technologies.

Key words: language, Russian language, educational technologies, crossword, rebus, modern education.

От первых лет независимости к сфере образования в нашей стране уделяется особое внимание. Особенно в неузбекских группах узбекского языка введение преподавания на государственном языке Закона «О государственном языке» послужило важным фактором в выполнении требований.

Потому что в Узбекистане их 130 Здесь живут представители разных национальностей и народов. Наше государство обязуется уважать национальные традиции, культуру и родной язык полученный также в общем словаре нашего государства «Государство Республика Узбекистан»

Введение статьи «Язык которых узбекский» является авторитетом узбекского языка и государственного языка. Было бы ошибкой сказать, что

это способствовало еще большему поднятию его репутации этого не произойдет.

Исходя из этих конституционных обязанностей и задач, образование в Узбекистане он будет переведен на 7 языков. Обучение их родному языку в неузбекских группах одновременно будет начато и преподавание узбекского языка как государственного наш Основной Закон и Закон «О государственном языке» в нашей стране послужил важной программой в выполнении ее требований. Образование на других языках преподавание предмета Узбекский язык как государственный язык в школах, по этому предмету Государственный образовательный стандарт формирования отдельных компетенций у обучающихся и определил цели и задачи данного предмета в образовательных программах.

Согласно требованиям ДТС, основная цель обучения узбекскому языку двоякая воплощенная в компетентности:

1. Разговорная компетентность – понимание на слух, чтение, говорение и письмо приобретение коммуникативных навыков.

2. Языковая компетентность – языковой материал (фонетика, лексика, грамматика) и приобрести достаточно знаний, чтобы уметь пользоваться средствами речи, знаниями и освоение видов речевой деятельности (слушание, чтение, говорение, письмо) подразумевается.

Языковой материал, языковые инструменты и определяются грамматические знания, необходимые навыки, которые необходимо сформировать. Сюда входит правильное произношение изучаемых слов и словоформ. письмо, грамматически правильное словообразование, правильный подбор слов, уметь правильно синтаксически и методически оценивать, составлять предложения и тон речи при определении требуется соответствующее использование возможностей литературного языка.

Узбекский язык для реализации этих целей и задач наряду с предоставлением информации о грамматике в учебниках, речевая компетентность литературно-художественные тексты для развития, жизнь узбекских поэтов и писателей и также приведены сведения о его работе. Читатель знаком с этой информацией с узбекского языка, увидев богатые образцы узбекского литературного языка и литературы развивает речевые навыки. То есть наряду с языковой компетенцией также формируется речевая компетентность и формируются необходимые научные знания.

Для образовательных учреждений, где обучение ведется на языках, кроме узбекского цель обучения узбекскому языку:

- деятельность студентов в бытовой и профессиональной сферах
- применять полученные знания узбекского языка в процессе общения
- формирование речевых компетенций, развивающих умения;
- устная и письменная грамотность учащихся на узбекском языке
- формирование языковых компетенций, направленных на развитие;
- самостоятельность на основе полученных знаний учащихся

- развивать, применять полученные знания, навыки и квалификацию в различных ситуациях состоит из формирования базовых компетенций, направленных на получение.

Исходя из вышеперечисленных целей и задач, в настоящее время мы ведем обучение на русском языке. Абдулла, Герой Узбекистана, Народный поэт Узбекистана Преподаявая жизнь и творчество Орипова, речь студентов о некоторых приемах и способах, полезных при развитии компетенций мы хотим поделиться нашими рекомендациями.

Известно, что Абдулла Орипов – настоящий деятель узбекской литературы так же всем известен. Его уникальная поэзия, неповторимое слово его строки пленили многих читателей. Мы поэты Узбекистана Мы известны как автор Государственного гимна республики. Неузбекский

студенты, обучающиеся в группах, особенно в классах русского языка, по учебникам узбекского языка оно представлено через отрывки из произведений поэта. Но больше всего информацию они получают из учебника узбекского языка для 10 класса.

“Абдулла На жизнь и творчество Орипова” был отведен 1 час. Но это данность темы информации сравнительно меньше, и она неполная. Учитель сам Педагогические навыки и достаточные теоретические знания предмета помогает раскрыть тему шире. А только сухая теоретическая информация

дать знания студенту, рассказав или написав лекцию это не оправдано, это естественно. Потому что сегодняшний студент любопытен со всех сторон и любит эффектность и яркость. Вот почему учитель учил эту тему

В этом отношении важное место занимают методы, использованные при объяснении.

Вот некоторые из них, которые мы можем использовать для преподавания этой темы прямо сейчас. Мы хотим поделиться своими мыслями об инновационных технологиях.

1. Метод «Картинный ребус». Этот метод часто используется в разделе урока «Подкрепление». будет уместно, если мы воспользуемся им частично. Мы знаем, что у учеников 10 класса психологически проходят последние этапы «переходного периода». Им трудно увлечься на уроке отдельными играми или командами. Это метод учащиеся должны будут определить произведения поэта, глядя на картинки. Например, если в ребусе показаны изображения рыбки, пруда и золотой монеты, то это оно. Там будет описано стихотворение поэта «Золотая рыбка».

2. Метод «быстрых вопросов и ответов». Используем этот метод в рамках урока «Изложенная тема мы сочли необходимым использовать его в разделе «Повторение и задание на домашнее задание». Студентам задаются вопросы о жизни и творчестве поэта. Учащиеся на вопросы им придется реагировать быстро. Запишите ответы учеников, это уместно, что они дают

таким образом, потому что в этом их партнеры учитывается усвоение ответов.

3. Метод «Проект». Этот метод мы будем использовать в «Заключительной части» урока мы сочли необходимым его использовать. Потому что это дано для литературного чтения в учебнике из-за относительно небольшого объема информации и ограниченности времени занятий, студентам может быть трудно получить обширную и полную информацию. Вот и все В некоторых случаях этот метод может сработать. «Проектный» метод – это метод, который может мотивировать студентов к самостоятельному обучению и поиску. В конце урока преподаватель рассказал ученикам о жизни и творчестве поэта поднимает интересную тему. Учащиеся в классе делятся на группы, группы назначается капитан.

Вышеупомянутые методы обучения воплощают новаторский педагогический дух не только улучшает разговорную компетентность студентов, но и независим от них помощь в привитии исследовательских и желательных качеств мы уверены, что это даст. Но в какой ситуации эти методы и методы или в каких условиях их использовать, как объяснить студентам нельзя забывать, что это зависит от педагогического мастерства учителя. Также устранение проблемных ситуаций, возникающих в процессе обучения существуют методы, используемые для достижения этой цели. Эти методы используются учеником на уроке. Важно обеспечить коммуникацию между преподавателем и эффективный учебный процесс. Представленный метод – это метод, призывающий всех учащихся к активности на уроке.

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*Дедаханова М.М.
самостоятельный соискатель
Наманганский государственный университет*

ИССЛЕДОВАНИЕ МЕТОДОВ И УПРАЖНЕНИЙ ДЛЯ ЛЕЧЕНИЯ УЧЕНИКОВ 12-15 ЛЕТ С ОТКЛОНЕНИЕМ В РАЗВИТИИ РЕЧИ

Аннотация. В данной статье рассматривается нейролингвистические приёмы преодоления патологических нарушений говорения и письма у учеников 12-15 лет. Рассмотрено нейролингвистический подход — это одно из направлений психотерапии и практической педагогики, и психологии, рассматривающее копирование вербального и невербального поведения людей, а также взаимосвязь между формами речи, движением глаз, тела и рук, с влиянием на окружающих.

Ключевые слова: нейролингвистический подход, вербального и невербального, нейролингвистические приёмы, нейропсихологическая коррекция.

*Dedakhanova M.M.
independent applicant
Namangan State University*

RESEARCH OF METHODS AND EXERCISES FOR TREATING 12-15 YEAR OLD STUDENTS WITH SPEECH DEVELOPMENT DEVELOPMENT

Abstract. This article discusses neurolinguistic techniques for overcoming pathological disorders of speaking and writing in students aged 12-15 years. The neurolinguistic approach is considered - this is one of the areas of psychotherapy and practical pedagogy and psychology, which considers the copying of verbal and non-verbal behavior of people, as well as the relationship between forms of speech, movements of the eyes, body and hands, with the influence on others.

Key words: neurolinguistic approach, verbal and non-verbal, neurolinguistic techniques, neuropsychological correction.

Нейролингвистические приёмы преодоления патологических нарушений говорения и письма у учеников 12-15 лет. Для устранения дефектов в речи, а также в письме у учеников в 12-15 лет были разработаны упражнения многими учёными нейролингвистами, логопедами, психологами на основе исследований, эти упражнения рекомендуются для устранения отклонения дефектов в речи, как заикание в любой форме,

дислалия, лалия, дислексия и дисграфия¹²⁸ так называемая нейролингвистический подход и нейропсихологическая коррекция. [1]:

Нейролингвистический подход — это одно из направлений психотерапии и практической педагогики и психологии, рассматривающее копирование вербального и невербального поведения людей, а также взаимосвязь между формами речи, движением глаз, тела и рук, с влиянием на окружающих. [2].

Нейропсихологическая коррекция – это исправление, изменение, приведение в норму процессов и функций, связанных с работой головного мозга: восприятия, внимания, пространственной ориентации, эмоционального реагирования, речи, памяти, моторики.

Учёные проводящие исследования в области нейролингвистики используют различные экспериментальные методы для того, чтобы с помощью визуализации мозга делать выводы о том, как язык представлен и обрабатывается в мозге. Эти методы включают парадигму вычитания, дизайннесоответствия, исследования, основанные на нарушениях, различные формы прайминга¹²⁹ и прямую стимуляцию мозга.

На основании рекомендованных упражнений для развития речи у школьников 12-15 лет с отклонением в развитии речи были проведены эксперименты, были использованы приёмы (элемент метода), которые делятся на словесные, наглядные, игровые. Наиболее распространены словесные приёмы:

речевой образец (речевая деятельность, которая должна предшествовать речевой деятельности детей; может использоваться неоднократно);

повторение (неоднократное использование одного и того же речевого элемента: звука, слова, фразы с целью его запоминания;

может быть индивидуальное, совместное ученика и учителя, хоровое);

объяснение (раскрытие воспитателем сущности какого-либо явления или образа действия);

указания (разъяснение ученику, как надо действовать, как достичь результата);

словесное упражнение (многократное выполнение учеником определённых речевых действий для выработки и совершенствования речевых умений и навыков);

оценкаречи ученика (мотивированное суждение об ответе ученика);

вопрос (словесное обращение, требующее ответа, задание ученику, предполагающее использование и переработку имеющихся знаний). [4].

128 дислексия и дисграфия-ребёнок пишет с ошибками, плохо читает. «Логопед для подростка». научная статья. 2023 г. karkusha.su/logoped-dlya-podrostka.

129 Прайминг - это идея о том, что воздействие одного стимула может повлиять на реакцию на последующий стимул без сознательного руководства или намерения

Наглядные приёмы – показ картинки, игрушки, движения или действия, положения органов артикуляции и т.п.

Игровые приёмы очень важны в развитии речи. Интригующая интонация голоса, живость эмоций повышает внимание детей. Можно задавать шутливые вопросы, использовать небылицы, перевёртыши, игру «Так или не так?», игровой персонаж, употреблять игровые формы оценки. Усиливают эмоциональное действие действия по выбору, элементы соревнования, красочность, новизна атрибутов, занимательность сюжетов игр.

Благодаря использованию различных приёмов развития речи происходит взаимопонимание учителя и ученика, родителей, которые первые побуждают к определённому речевому действию. Многие работы над упражнениями с предметами приобретает для ученика 12-15 лет ценностно-смысловой характер, что позволяет ученикам в большинстве случаев достигать значительных результатов в развитии тонкой моторики рук. С целью коррекции речевых нарушений упражнения с мячом выполняются под речевое сопровождение. Применение речевого сопровождения помогает подчинить движения тела определенному темпу, сила голоса определяет их амплитуду и выразительность. Этот прием особенно важен для учеников с речевыми расстройствами, так как индивидуальный внутренний ритм учеников зачастую или ускорен, или, наоборот, замедлен. У них часто изменен тонус мышц, поэтому включение упражнений на активное расслабление и напряжение мышц, особенно в сочетании с речью крайне необходимо. Звуковая гимнастика действует подобно вибромассажу, расслабляя тем самым мышцы гортани, а это, в свою очередь, очень важно для учеников с речевой патологией, не умеющих расслаблять мускулатуру лица, шеи, гортани. Для учеников с речевыми отклонениями проговаривание стихов и другого материала одновременно с движениями дает ряд преимуществ: речь ритмизируется движениями, становится более громкой, четкой и эмоциональной.

С учетом основных недостатков лексической стороны речи учеников с нарушениями развития, система коррекционной работы основывается:

на обогащении словаря, т.е. усвоении ранее неизвестных ученикам слов, а также новых значений тех слов, которые уже имелись в словарном запасе;

активизации словаря, т.е. перенос как можно большего количества слов из пассивного словаря в активный. [5].

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*Джалолов Б.Д.
независимый исследователь
Наманганский государственный университет*

СОЗДАНИЕ ДЕТСКОЙ ПЕЧАТИ СОВЕТСКОЙ ВЛАСТЬЮ

Аннотация. В данной статье дается историко-критический анализ разработки мер бывшего советского правительства на пути идеологического воспитания детей страны, их социально-духовного воспитания на идеях «социалистической строя» и дальнейшего расширения их деятельности, роли бывшей советской прессы в освещении детской жизни.

Ключевые слова: «Пионер», «Пионерская правда», «Вожатый», «Ленинская Искра», «Красные искатели», «Пионер Востока», «Юный Ленинец», «Народное образование», «Среднее специальное образование», «Мурзилка», "Веселые картинки".

*Jalolov B.J.
independent researcher
Namangan State University*

CREATION OF CHILDREN'S PRESS BY THE SOVIET AUTHORITY

Annotation. In this state, a historical and critical analysis is given of the development of measures of the former Soviet government on the path of ideological education of the country's children, ix socio-spiritual education on the ideas of "socialist construction" and further expansion ix of activities, the role of the former Soviet press in covering children's lives.

Keywords: "Pioneer", "Pioneer Truth", "Counselor", "Lenin Spark", "Red Seekers", "Pioneer of the East", "Young Leninist", "Public Education", "Secondary Special Education", "Murzilka", "Merry Pictures".

Как и везде, бывшее советское правительство в Узбекистане уделяло особое внимание воспитанию детей «в социалистическом, идеологическом ключе» с точки зрения их собственных интересов. Для этого бывшее советское правительство возглавило мероприятия по созданию прессы, которая воздействовало на сознание и мировоззрение детей и была направлена на привлечение детей в их среду обитания.

Однако из-за войны, начавшейся в 1941 году, бывшее советское правительство было вынуждено приостановить свою работу по этому вопросу. Послевоенные реформы привели к возрождению и развитию детской прессы, а также возобновлению работы некоторых детских газет,

которые прекратили свою деятельность из-за войны. В частности, из-за войны газета "Пионер Востока", которая была временно закрыта 4 июля 1941 года, возобновила свою деятельность с 1 января 1957 года.¹³⁰

Газета "Пионер Востока" была награждена указом Президиума Верховного Совета СССР от 24 ноября 1977 года за активное участие в развитии пионерского движения - жизни детей разных национальностей и братских народов, проживавших в Узбекистане, привлечение "добровольных" пионерских отрядов к популяризации пионерского движения.¹³¹

Эти газеты были выпущены в связи с различными идеологическими организациями, связанными с детьми, октябрятами, пионерами, комсомольцами.

В качестве примера организациям бывших союзных республик, находившихся под их влиянием, бывшее советское правительство впервые возобновило деятельность газет и журналов всесоюзного масштаба, некоторые из которых не прекратили своего существования даже в разгар войны.

В первую очередь свою деятельность осуществлял ежемесячный литературно-художественный и общественно-политический журнал "Пионер" Центрального совета Всесоюзной пионерской организации для освещения работы Пионерской организации, который концентрировал вокруг себя 10-15-летних детей, тогда как с 1924 года он стал издаваться на русском языке в Москве¹³².

В 1958 году в Москве была основана Всесоюзная детская газета "Пионерская правда" (выходило на русском языке 2 раза в неделю)¹³³, а в 1976 году эта газета тиражом в 10 миллионов экземпляров совместно с народными образованием и общественными организациями организовала детские праздники, конкурсы.

На страницах газеты участвовали государственные и общественные деятели, ученые, писатели, учителя и другие, и они активно помогали развиваться школам и воспитывать детей «в духе советской идеологии» в общенациональном масштабе.¹³⁴

В целях пропаганды деятельности Вожатых, возглавлявших пионерские отряды в школах, общественно-политический журнал «Вожатый» (основан в 1924 г.) в каждом номере давал соответствующие указания и рекомендации¹³⁵.

В целях быстрого распространения своих идей среди детей в бывшем Советском Союзе к 1976 году было учреждено 28 газет и 35 журналов для

130 Советская энциклопедия Узбекистана». Том-8. Ташкент.: "УСЭ". 1976. -Б.544

131 «Искра Ленина». 26 ноября 1977 г.

132 «Советская энциклопедия Узбекистана». Том 8... -С 544.

133 «Советская энциклопедия Узбекистана» Том 8...-С. 449

134 «Советская энциклопедия Узбекистана». Том 8... -Б 449

135 «Большая Советская энциклопедия» Том-5. Москва.: "СЭ". 1971. -С 248

детей по всей стране, а также для освещения деятельности пионерских и комсомольских организаций, освещавших детей Узбекистана, находящихся под контролем бывшего Советского правительство.

В октябре 1945 года в Ташкенте начала свою деятельность газета «Комсомолец Узбекистана» (на русском языке) - печатный орган Республиканского союза комсомола, в основном освещавшая работу по пропаганде труда молодых земледельцев в республике и призывавшая молодежь осваивать земли.¹³⁶

С 1 июля 1946 года была восстановлена газета «Ленинская искра», которая была печатным органом пионерской организации республики, сначала 1929 года в Самарканде было опубликовано 3000 экземпляров, к 1974 году тираж достиг 780000 экземпляров¹³⁷.

Газета «Ленинская искра» служила главным печатным органом по пропаганде идеологии и идей Коммунистической партии среди детей. Исходя из интересов центра, он стремился через свои страницы распространять различные мероприятия среди детей республики.

Например, начиная с 1930 года, узбекские дети сами выступили с инициативой поставлять собранное ими хлопка в текстильные города России.¹³⁸ Во время сбора хлопка в Республике школьники, собравшие больше всего хлопка в специальных поездах доставляли сотни тонн хлопка в город Иванова, что вошло в привычку.

Также, 24 января 1963 года на ташкентском вокзале прошла церемония провода эшелона «белого золота», груженного хлопком, во главе с трудолюбивыми детьми.¹³⁹ Кроме того, газета обращала внимание на усиление влияния советской власти среди детей посредством таких акций, как «Красные искатели», «Цветы Узбекистана - ноқоратупроқ зона», («Ўзбекистон гуллари-ноқоратупроқ зона») «Пионерский металло-Ташкентскому метрополитену».

В целях дальнейшего совершенствования процесса трудового воспитания детей, особенно в целях повышения опыта детей в выращивании сельскохозяйственной продукции и в области сельского хозяйства, в ее выпусках организована страничка «Малая академия юных фермеров». ¹⁴⁰ В частности, на одной из страниц Академии есть статья для детей «Наш кокон-наше золото» («Пилламиз-тилламиз»), в которой детей обучают секретам выращивания коконов, первым этапам кормления коконов-червей, требованиям соблюдения санитарных правил в помещении¹⁴¹. Но ничего не было сказано о том, что представленные в статье требования и инструкции

136 «Советская энциклопедия Узбекистана». Том-5. Ташкент.: «УСЭ». 1974. -Б. 615

137 Советская энциклопедия Узбекистана». Том-6. Ташкент.: «УСЭ». 1975. -Б. 331

138 «Кто это, что это такое?» Том-2. Ташкент.: «УСЭ». 1987. -Б. 95

139 «Искра Ленина». 22 ноября 1977 г.

140 Искра Ленина». 21 марта 1878 г.

141 Рахмонбердиев. К. Алимов. А. «Наша таблетка-золото» // «Ленинская искра». 18 апреля 1878 г.

не подходят детям школьного возраста, и они всегда нуждаются во внимании и помощи взрослых.

Вместо улучшения качества обучения, газета стала наполнять свои страницы такими темами, как сбор мусора и заниматься сельским хозяйством, и она становилось «коммунистической традицией».

В январе 1952 года начал свою работу литературно-художественный и общественно-политический журнал «Гулхан» (“Костёр”) предназначенный для детей 10-15 летнего возраста, который издавался под названием «Пионер» до 1958 года, освещая жизнь новости и творчества пионеров¹⁴².

В бывшем Советском правительстве усилилось деятельность многочисленной педагогической печати и к 1975 году учредило около 50 педагогических журналов с целью дать указания и рекомендации педагогическим коллективам общеобразовательных школ по идеологическому воспитанию детей.

Самые крупные из них - “Советская педагогика” (1937г), “Народное образование” (1946 г), “Среднее специальное образование” (1954г), “Вечерняя средняя школа” (1961г) и “Воспитание школьников” (1966г) советские журналы педагогики, занимавшиеся широкой пропагандой.¹⁴³

Газеты и педагогические журналы в системе образования играли важную роль в детской прессе Узбекистана, в том числе в Ташкенте выходили два раза в неделю (первый номер вышел 4 июля 1934 года), печатный орган Министерства образования Узбекистана и профсоюз работников образования - «Учительский вестник» публиковал статьи «По пути «коммунистического воспитания» детей республики, давал научно-методические указания работникам народного образования.¹⁴⁴

Советское правительство того времени не оставалось в стороне со своей идеологией в воспитании детей в детских садах, яслях и в своей деятельности ставило такие задачи, как обеспечение того, чтобы воспитанники детских садов росли с идеями системы.

С этой целью Советское правительство основало журналы для дошкольников и первоклассников школ. Потому что с 6-7 лет первой задачей советского правительства было обращено внимание на воспитание детей в духе верности партийным идеям.

Всесоюзные журналы «Мурзилка» (издавались в Москве с 1924 г¹⁴⁵.) и «Веселые картинки» (выпуск с 1956 г¹⁴⁶.) издавались для детей 6-8 лет, и к 1974 году общий тираж этих журналов достигло 5,6 миллиона.

142 "Ташкент". Энциклопедия. Ташкент.: «Главная редакция «Комуслар». 1992. -Б 103

143 «Советская энциклопедия Узбекистана». Том 8... –Б 488

144 «Советская энциклопедия Узбекистана». Том 13. Ташкент.: “УСЭ”. 1979. -Б 628

145 «Большая Советская Энциклопедия». Том-17. М.: “СЭ”. 1974. -С. 124

146 «Большая Советская Энциклопедия». Том-4. М.: “СЭ”. 1971. -С. 570

В Узбекистане правительству того времени в этом деле помогал журнал «Гунча» (“Бутон”) (выпуск с 1958 г.147), предназначенный для детей 6-8 лет. На своих страницах журнал давал такие задания, как «Домашнее задание по труду», а также стихи, пропагандирующие социалистический строй, что свидетельствует о том, что первый этап идеи «воспитания детей 6-8 лет» для детей начальной школы начался таким образом.

Советскими властями была поставлена задача перед детской прессой, выходившей сотнями тысяч тиражей, «воспитывать детей в духе верности» к идеям коммунистического режима, которые охватывали их интересы, но полувековая идеологическая борьба не оправдала себя, уверенность в завтрашнем дне, создание важных условий для воспитания гармонично развитого поколения, и для этих целей была создана национальная пресса независимого Узбекистана для детей. Не секрет, что журналы «Гунча» (“Бутон”) и «Гульхан» (“Костёр”), газета «Марифат» («Просветительство») активно участвовали в обучении и укреплении знаний узбекских детей.

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*Джанакеева Д.Р.
студент*

*Научный руководитель: Ахмедова Л.А., к.э.н.
Дагестанский государственный университет*

АНАЛИЗ КРЕДИТОСПОСОБНОСТИ ПРЕДПРИЯТИЯ

Аннотация. Последнее десятилетие значимость оценки показателей кредитоспособности значительно увеличилась. Это обусловлено несколькими основополагающими факторами. Во-первых, возросла роль банковской системы в структуре экономики. Производственный сектор весьма тесно связан с банковским, они являются комплиментарными и стимулируют развитие друг друга. В условиях стремительного развития высоких технологий, предприятиям важно использовать актуальные и обновленные производственные фонды. Однако, как известно, затраты на обновление основных средств могут достигать миллионов рублей и большинство предприятий не обладают возможностью покрывать столь высокие затраты собственными средствами. Эти и другие обстоятельства вынуждают организации прибегать к привлечению дополнительных заемных средств.

Во-вторых, на каждом этапе производственного цикла у предприятия могут возникнуть затруднения с обеспечением финансовых потребностей для выполнения базовых хозяйственных операций. В таких ситуациях очевидным решением может стать обращение к внешним источникам покрытия текущих затрат. К тому же, правильно подобранное соотношение внутреннего и внешнего капитала позволяет в разы повысить показатели эффективности, рентабельности и оборачиваемости активов предприятия.

В данных условиях необходимым становится расчет и анализ показателей кредитоспособности организаций.

Ключевые слова: кредитоспособность, ликвидность, финансовая устойчивость, методы анализа, активы, обязательства.

*Dzhanakaeva D.R.
student*

*Scientific supervisor: Akhmedova L.A., Ph.D.
Dagestan State University*

ANALYSIS OF THE COMPANY'S CREDITWORTHINESS

Annotation. Over the past decade, the importance of assessing creditworthiness indicators has increased significantly. This is due to several

underlying factors. Firstly, the role of the banking system in the structure of the economy has increased. The manufacturing sector is very closely related to the banking sector; they are complementary and stimulate each other's development. In the context of the rapid development of high technologies, it is important for enterprises to use current and updated production assets. However, as you know, the cost of updating fixed assets can reach millions of rubles and most enterprises do not have the ability to cover such high costs with their own funds. These and other circumstances force organizations to resort to attracting additional borrowed funds.

Secondly, at each stage of the production cycle, an enterprise may have difficulty meeting the financial needs to carry out basic business operations. In such situations, the obvious solution may be to turn to external sources to cover current costs. In addition, the correctly selected correct ratio of internal and external capital allows you to significantly increase the efficiency, profitability and asset turnover of the enterprise.

In these conditions, it becomes necessary to calculate and analyze the creditworthiness indicators of organizations.

Key words: creditworthiness, liquidity, financial stability, analysis methods, assets, liabilities

Экономическая сущность кредитоспособности предприятия представляет собой финансово-экономический показатель, который отражает способность предприятия своевременно погашать ссудные средства. В данном контексте важно разграничивать понятия платежеспособности и кредитоспособности. Первый показатель по своему содержанию является больше широким и помимо прочего, включает в себя второй. При этом основным различием выступает то, что платежеспособность характеризует способность предприятия погашать свои обязательства в конкретный, зачастую текущий, момент времени. Кредитоспособность же, напротив, отражает возможность организации стабильно и своевременно выплачивать заемные средства в течение определенного срока времени. Поэтому важно разграничивать два данных понятия.

В условиях динамически развивающихся рынков каждому предприятию необходимо совершенствовать свои товары и услуги, чтобы оставаться конкурентоспособными. Для этих целей необходимо перманентно следить за изменениями спроса, возможностями покрытия потребностей потребителей и бесперебойного выпуска продукции. Однако на практике практически невозможно оставаться на плаву используя исключительно собственный капитал и активы. Поэтому предприятиям важно правильно рассчитать необходимый объем финансовых ресурсов, оценить возможность их покрытия за счет кредитов и займов в банках. Для

таких целей анализ и оценка показателей кредитоспособности являются фундаментальными.

Для оценки данного показателя предприятию необходимо выполнить ряд шагов, которые и представляют собой содержание анализ кредитоспособности:

Во-первых, это определение цели данного анализа. Она во многом зависит от величины привлекаемых средств и ожиданий и планов предприятия в вопросе частоты прибегания к такому источнику финансирования. Возможны такие варианты, как единоразовое, периодичное обращение к кредиту и стабильное его использование для поддержания функционирования и налаженности всех хозяйственных процессов.

Во-вторых, это выбор методов и подходов к анализу кредитоспособности. На данном этапе необходимо учитывать такие аспекты как масштаб фирмы, отрасль производства, в которой фирма осуществляет свою деятельность, организационная основа данного предприятия, а также детализированный характер анализа его функционирования. Третий этап характеризуется четким определением объема и источников той или иной информации, необходимых при анализе кредитоспособности фирмы. В качестве источников информации можно использовать определенные документы, такие как формы бухгалтерской отчетности. В данном аспекте к источникам информации необходимо применить четкие требования. К ним можно отнести: достоверность, объективность и актуальность. Стоит отметить то, что наибольшую ценность представляют бухгалтерская отчетность фирмы, к которой относятся бухгалтерский баланс и пояснительная записка к нему, а также отчетность о прибыли и убытках фирмы, отчеты по обороту капитала предприятия, его движению.

На выведении относительных показателей фирмы строится четвертый этап. К таким показателям можно отнести, рентабельность, финансовую устойчивость, а также показатель оборачиваемости капитала предприятия. К рассмотрению данного аспекта необходимо подходить комплексно, рассматривать все показатели в совокупности, так как отдельно учитывать эти показатели при составлении «финансовой картины предприятия» невозможно. Рассмотрим отдельно каждый показатель. Ликвидность, как показатель финансового положения фирмы, характеризуется способностью предприятия распределить свои активы так, чтобы покрыть обязательства.

Стоит обратить внимание на то, что ликвидность активов имеет существенное отличие от общей ликвидности баланса фирмы. Отличие заключается в том, что ликвидность активов подразумевает под собой быстроту преобразование активов в капитал (деньги). Ввиду этого появляется некая закономерность: чем меньше период преобразования, тем ликвиднее активы фирмы.

При оценке необходимо в первую очередь группировать активы и пассивы предприятия по уровню их ликвидности и сроку покрытия обязательств. Применяется следующая классификация:

A1-высоколиквидные: это определенные денежные средства, а также ценные бумаги, к которым относятся акции, облигации, вексели и т.д.;

A2- активы, которые поддаются быстрой реализации: они включают денежные средства, к которым можно отнести дебиторские задолженности. Они характеризуются наличностью, однако относить их к наиболее ликвидным активам считается неправильно, так как они могут быть использованы фирмой, до поступления их на ее счет. Стоит отметить, что некоторые экономисты к числу быстрореализуемых активов относят только краткосрочные дебиторские обязательства, а другие - готовую продукцию, которую можно путем реализации преобразовать в денежные средства. Но допустимо это только при учете готового товара или услуги, потребительский спрос которых на протяжении определенного периода времени является стабильным. Как правило, к таковым относятся товары первой необходимости;

A3-медленно реализуемые активы: к ним относятся активы, не попавшие в группы A1 и A2: запасы, долгосрочные дебиторские обязательства и другие активы. Это активы, которые возможно реализовать при возникновении угрозы банкротства фирмы, а так в ситуациях необходимости срочного погашения долгов предприятия;

A4-активы с затрудненной реализацией: к ним относятся внеоборотные активы (производственные фонды, нематериальные активы). По сути, их можно отнести к медленно реализуемым активам. Рассмотрим пассив баланса по степени срочности оплаты:

П1-срочные задолженности: к ним относятся страховые обязательства, задолженности перед работниками фирмы, ее поставщиками, налоговые задолженности;

П2- краткосрочные пассивы: это краткосрочные кредиты и другие краткосрочные задолженности;

П3-долгосрочные пассивы: в их число входят долгосрочные кредиты и заемные средства;

П4-постоянные пассивы.

Таким образом для достижения ликвидного баланса фирмы необходимо достичь следующего соотношения:

$$A1 \geq П1; A2 \geq П2; A3 \geq П3, A4 < П4$$

Если хотя бы одно из неравенств не удовлетворяет заданным условиям, можно делать вывод о неликвидности баланса. Тем не менее, делать категоричные утверждения о его неликвидности не является корректным подходом. Поэтому анализ ликвидности сводится к расчету коэффициентов абсолютной, быстрой и текущей ликвидности с целью получения более объективных результатов и принятия необходимых мер.

Коэффициент абсолютной (срочной) ликвидности определяется отношением высоколиквидных активов к текущим обязательствам и рассчитывается по следующей формуле:

$$K_{ал} = A1 / П1+П2$$

Данный показатель отражает уровень платежеспособности компании, показывает долю ее краткосрочных обязательств, которые можно погасить на момент составления финансового отчета. Минимальное значение этого показателя составляет 0,2, это означает, что как минимум 20% обязательств могут быть покрыты наличными средствами.

Коэффициент быстрой ликвидности отражает способность компании погасить текущие обязательства за вычетом запасов. Этот показатель является важным элементом анализа ликвидности, поскольку он показывает, насколько компания может погасить свои обязательства не только за счет наличных средств, но и за счет дебиторской задолженности.

$$K_{бл} = A1+A2/П1+П2$$

Данный показатель служит для оценки способности организации закрыть свои краткосрочные обязательства в случае поступления платежей по краткосрочным долгам от своих клиентов. Рекомендуемое значение этого показателя составляет от 0,8 до 1, однако из-за возможного роста дебиторской задолженности он может значительно превышать данный диапазон. Коэффициент текущей ликвидности позволяет произвести общую оценку финансовой платежеспособности баланса предприятия

$$K_{тл} = A1+A2 + A3/П1+П2$$

Этот показатель отражает общую ликвидность и позволяет оценить, насколько оборотные активы способны покрыть текущие обязательства. Рекомендуемый диапазон для него – от 1 до 2. Значение менее 1 свидетельствует о том, что текущие обязательства превышают текущие активы. Высокий уровень может быть обусловлен замедлением оборачиваемости средств, замороженных в запасах, или слишком высоким уровнем дебиторской задолженности. Эти показатели интересны не только для внутренних, но и для внешних пользователей финансовой отчетности.

$K_{ал}$ — для поставщиков сырья и материалов;

$K_{бл}$ — для банков;

$K_{тл}$ — для покупателей и держателей акций и облигаций.

Показатели рентабельности рассчитываются путем соотношения валовой либо чистой прибыли организации, которая отражена в отчете о финансовых результатах, к различным показателям этого отчета.

При анализе финансового положения кредитной организации, полученная доходность позволяет экономисту оценить достоверность предоставленных заемщиком данных. Высокая доходность бизнеса потенциального заемщика по сравнению с предприятиями того же сектора деятельности может указывать на снижение затрат на производство или неполный учет включаемых расходов. Доходность организации

представлена в относительных величинах. Например, измеряемых в процентах или в виде коэффициентов. В современной мировой практике бухгалтерского учета существует множество показателей доходности деятельности компании. Рассмотрим наиболее значимые из них.

Рентабельность фирмы отражает прибыльность всей ее деятельности, отражая сколько рублей чистой прибыли организации приходится на рубль выручки от продаж. Рассчитывается этот показатель как отношение чистой прибыли к выручке. Нормативным значением данного показателя принято считать 20%, однако на практике стоит учитывать множество факторов, таких как отрасль, к в рамках которой функционирует предприятие, его организационно-правовую форму и т.д. Так же важно сравнивать данный показатель со среднеотраслевыми значениями. В таблице 1 представлен неполный перечень среднеотраслевых значений рентабельности продаж, опубликованный Федеральной Налоговой Службой России.

Таблица 1

Вид экономической деятельности (согласно ОКВЭД-2)	2022 год
	Рентабельность проданных товаров, продукции (работ, услуг), %
Всего	14.6
сельское, лесное хозяйство, охота, рыболовство и рыбоводство	21.2
фермерство, охота и предоставление соответствующих услуг в этих областях	20.0
лесоводство и лесозаготовки	5.7
рыболовство и рыбоводство	36.9
добыча полезных ископаемых	33.0
добыча угля	50.6
добыча сырой нефти и природного газа	25.9
добыча металлических руд	51.6
добыча прочих полезных ископаемых	37.1
обрабатывающие производства	16.9
производство пищевых продуктов	11.1
производство напитков	18.3
производство табачных изделий	49.3
производство текстильных изделий	14.2
производство одежды	16.2
производство кожи и изделий из кожи	11.5
обработка древесины и производство изделий из дерева и пробки, кроме мебели, производство изделий из соломки и материалов для плетения	9.9
производство бумаги и бумажных изделий	24.1

деятельность полиграфическая и копирование носителей информации	20.0
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Еще одним важным показателем в рамках проведения анализа кредитоспособности предприятия группы является рентабельность внешнего капитала. рентабельность внешнего капитала показывает величину чистой прибыли предприятия с единицы рубля заемных средств, вложенного в деятельность предприятия. В развитых странах нормативом этого коэффициента считается диапазон от 10% до 12%. Однако, если в стране высокий уровень инфляции, то увеличивается и рентабельность капитала.

Рассмотрим такой показатель как финансовая устойчивость фирмы. Финансовая устойчивость-способность фирмы сохранять свое финансовое равновесие между пассивами и активами, внешними и внутренними источниками финансирования, при этом необходимо предотвращать резкие скачки в их соотношении.

Проверка соотношений активов и пассивов бухгалтерского баланса фирмы предоставляет собой сущность анализа финансовой устойчивости. Именно посредством ее оценивается соответствие потребностей данного предприятия исходя из существующей структуры бухгалтерского баланса. На данном этапе происходит прогнозирование способности предприятия погашать свои обязательства и определение тенденций ее изменения. Важными показателями этой группы являются:

- 1) Коэффициент соотношения заемных и собственных средств;
- 2) Коэффициент автономии;
- 3) Коэффициент финансовой зависимости;
- 4) Коэффициент финансовой устойчивости.

Первый показатель характеризует величину заемных средств, приходящихся на каждый рубль собственных средств, вложенных в активы фирмы. Снижение финансовой устойчивости предприятия может произойти при росте данного показателя за отчетный год, так как он характеризует зависимость предприятия от привлеченных финансов.

Коэффициент автономии (коэффициент концентрации собственного капитала) характеризует долю собственных средств фирмы в общей сумме источников финансирования. Его определяют следующим образом: чем выше Кавт, тем большей финансовой устойчивостью обладает фирма и тем меньше она зависит от внешних кредиторов.

Коэффициент финансовой зависимости характеризует долю средств внешнего финансирования в общем количестве источников финансирования деятельности предприятия.

Коэффициент финансовой устойчивости показывает какая часть активов организации сформирована за счет постоянных источников. Оптимальное значение этого коэффициента — 0,8 -0,9.

После определения необходимых показателей, на заключительном этапе анализа кредитоспособности, составляются выводы по каждой группе показателей. Здесь важно учитывать, кто и с какой целью проводит анализ. В случае, когда анализ проводится банком или другой ссудной организацией, предприятию присваивается рейтинг кредитоспособности, с помощью которого можно судить о риске невыплаты по обязательствам. Пример шкалы рейтинга кредитоспособности представлен на рисунке 1.

Рисунок 1.

Класс рейтинга	Характеристика
Класс А	Высокая степень кредитоспособности
Класс В	Удовлетворительная степень кредитоспособности
Класс С	Низкая степень кредитоспособности
Класс D	Неудовлетворительная степень кредитоспособности

Итак, подводя итоги, можно констатировать следующее: анализ кредитоспособности предприятия – трудоемкий процесс, требующий особого внимания и точности. Однако его проведение в условиях активно развивающейся рыночной экономики и быстрорастущей роли банковского сектора неизбежно. Существующие методы анализа позволяют в полной мере сформировать выводы о кредитной готовности предприятия, что существенно снижает риски невозвращения средств. Эта форма анализа применяется не только банками, но и финансовыми специалистами при проведении комплексного и финансового анализа предприятия.

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*Джанкабилов И.Х.
доцент
кафедра географии*

Шахрисабзский государственный педагогический институт

**ТЕХНОЛОГИЯ ПРИМЕНЕНИЯ АЭРОКОСМИЧЕСКИХ
МАТЕРИАЛОВ ПРИ СОСТАВЛЕНИИ ЛАНДШАФТНО-
ГЕОИНДИКАЦИОННЫХ КАРТ (НА ПРИМЕРЕ
КАШКАДАРЬИНСКОЙ ОБЛАСТИ)**

Аннотация. В статье рассматриваются некоторые вопросы становления ландшафтно-геоиндикационных карт с помощью комплектов многозональных космических снимков и их особенность как научного направления.

Ключевые слова. Дистанционное метод, дешифрирование, ландшафт, индикация, информативность, спектр, стереоскопический метод, генерализация, многозональные снимки.

*Dzhankabilov I.Kh.
associate professor
Department of Geography
Shakhrisabz State Pedagogical Institute*

**TECHNOLOGY OF APPLICATION OF AEROSPACE MATERIALS IN
COMPILATION OF LANDSCAPE-GEOINDICATION MAPS (USING
THE EXAMPLE OF KASHKADARYA REGION)**

Abstract. The article discusses some issues of the formation of landscape-geoindication maps using sets of multispectral space surveys and its essence as a scientific direction.

Keywords. Remote, decoding, landscape, indication, information content, spectrum, stereoscopic method, generalization, multispectral.

В данной статье, опираясь на результаты дешифрирования многозональных комплектов разного масштаба, раскрываются новые возможности дистанционного метода для составления ландшафтно-индикационных карт.

Возможные области применения космических изображений Земли и общие принципы их ландшафтного дешифрирования в той или иной степени раскрыты и обобщены в монографиях и статьях, а также сборниках [1-6 и 8].

Целенаправленное исследование многозональных комплектов разного масштаба показал, что для изучения геоморфологических объектов

и, особенно, внешних компонентов ландшафта, наиболее информативными являются космоматериалы, выполненные в видимой части спектра 0,5-0,6 и 0,6-0,7 мкм.

С целью составления ландшафтно-геоиндикационных карт, выбранные нами космоматериалы локального и детального уровня генерализации и фотопланы по Кашкадарьинской области были выполнены в видимой части спектра. Они использовались нами для более подробного расчленения элементов ландшафта. При анализе МДС в масштабах 1:1 000 000, 1:500 000 и 1:200 000 применялся стереоскопический метод дешифрирования.

При составлении ландшафтно-индикационной карты на основе дистанционного метода весь процесс работ был разделен на следующие четыре этапа исследования: подготовительный, камеральный, полевой и заключительный – составление оригинала карт.

В период подготовительного этапа были изучены литературные, картографические и фондовые материалы.

На втором этапе, с одной стороны, были заказаны необходимые космоизображения в видимой части спектра разного масштаба (1:1 000 000, 1:500 000 и 1:200 000). С другой стороны, были собраны требуемые топографические и тематические карты (геологическая, геоморфологическая, почвенная, растительная и др.). На камеральном этапе исследования был использован стереоскопический метод дешифрирования. В процессе интерпретации результатов дешифрирования широко применялся универсальный топографический проектор (УТП – 2М). Далее, весь собранный материал был анализирован и систематизирован. Он лег в основу при разработке предварительного макета легенды и составления рабочей схемы ландшафтной карты.

На третьем этапе, во время полевых работ сочетались методы полевого дешифрирования и маршрутного наблюдения с целью комплексного изучения морфологических особенностей ландшафта на ключевых участках. В полевых условиях выяснялась закономерность распространения природно-территориальных комплексов. Определялся характер взаимосвязи рельефа, покровных образований, особенности увлажнения почвы и растительного сообщества. В цели данного этапа входили также задачи уточнения дешифрированных границ ландшафта и определение таксономических рангов.

На заключительном этапе был разработан окончательный макет легенды и составлен авторский оригинал ландшафтной карты региона в масштабе 1:300 000.

При составлении ландшафтной карты в качестве таксономических единиц нами принята следующая иерархия: класс – подкласс – тип – род – вид. Принципы выделения этих таксономических единиц обоснованы в работах А.Г.Исаченко и Н.А.Николаева [7,9]

Эти принципы учитывались нами при интерпретации результатов дешифрирования и использовались при ландшафтном районировании.

Комплексное изучение ландшафтов региона по комплектам сканерного изображения (КСИ) детального и локального уровня генерализации позволило нам оконтурить и классифицировать 2 класса, 5 подклассов, 7 типов, 21 род и 30 видов ландшафта.

При выделении ландшафтных классов учитывались основные морфоструктурные элементы региона – равнинный и горный рельеф. Они оконтуриваются на космоизображениях мелкого масштаба. Горному рельефу присущ темный фототон и шероховатый рисунок изображения. Равнины оконтуриваются светлым фототоном и зернистым рисунком изображения.

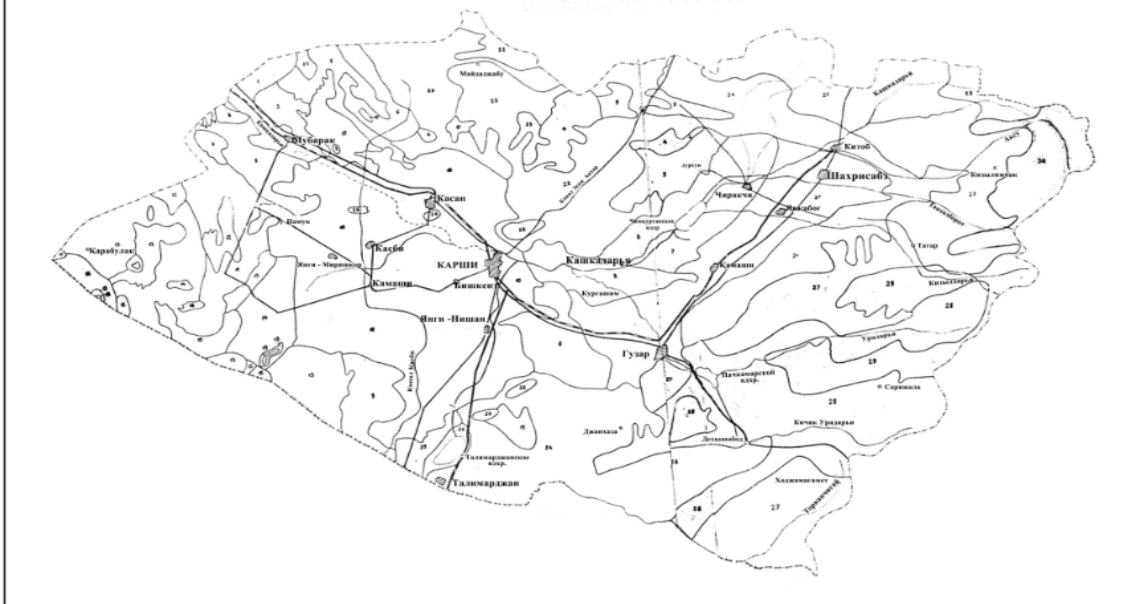
При разделении на подклассы учитывались биоклиматические дешифровочные признаки. В частности, в горных морфоструктурах региона выделяются четыре подкласса, а в пределах равнин – лишь один подкласс. Их контуры легко прослеживаются на дистанционных материалах среднего масштаба.

Типы ландшафтов различаются по их гипсометрическому расположению. По этим признакам в пределах равнин были отдешифрированы три типа (I - речные долины, II - песчаные равнины и III - озерные котловины), а в пределах горных морфоструктур – четыре типа (IV - предгорные равнины и адыры, V - поверхность низкогорного уровня, VI - поверхность среднегорного уровня, VII - поверхность высокогорного уровня).

При оконтуривании рода ландшафтов особое внимание было уделено дешифрировочным характерным признакам, а при разделении видов – черты рельефа и отложений.

На основе перечисленной выше таксономии ландшафтов была создана ландшафтно-геоиндикационная карта Кашкадарьинской области масштаба 1:3000000(рис №1).

**РИС 1 ЛАНДШАФТНО-ГЕОИНДИКАЦИОННАЯ КАРТА КАШКАДАРЬИНСКОЙ ОБЛАСТИ
(на основе дешифрирования космоснимков)
в масштабе 1:300 000**



Легенда к ландшафтно-геоиндикационной карте Кашкадарьинской области

1. Современная поймас комплексом песчаных отмелей, островов и тугаев. Тугайная растительность на пойменно-аллювиально-луговых почвах.
2. Такыровидные понижения с маломощным песчаным покровом, периферии русла. Тростниковые заросли тамарикса и акбаша на солончаковых почвах.
3. Солончаковые понижения. Солянка карабарака на солончаковых почвах.
4. Дельтовые орошаемые равнины. Культурная растительность на светлых сероземах.
5. Дельтовые равнины с такыровидными понижениями. Осачковые мятличники на такырных почвах.
6. Субаэральная часть дельты. Тугайная растительность на луговых почвах.
7. Первая и вторая надпойменная террасы. Культурная растительность на аллювиально-луговых почвах.
8. Третья надпойменная террасы. Культурная растительность (озимая пшеница) на типичных сероземах.
9. Вторая и третья надпойменная террасы. Полынь раскидистая и донашуровая формация на пустынно песчаных почвах
10. Первая и вторая надпойменная террасы. Культурная растительность на сероземно-оазисных почвах.

11. Массивы грядовых песков. Саксаульники, кандым, сюзан на песчано-пустынных почвах.

12. Массивы грядовых песков с такырами и солончаками. Белый саксаул, кандым, сюзан на песчаных почвах.

13. Массивы бугристо грядовых песков. Псаммофильная растительность с саксаульниками, на песчаных почвах.

14. Массивы бугристо ячеистых песков. Псаммофитная растительность на песчаных почвах и полынь на светлых сероземах.

15. Площадь покровных песков. Саксаул, тамарикс, джантак, бояличник на такыре, солончаках и пустынно-песчаных почвах.

16. Такыровидные поверхности. Саксаул, тамарикс, полынь, джантак, на солончаках и такырах.

17. Песчано-щебнистые поверхности на речных террасах. Полынь и солянки на светлых сероземах и песчано-щебнистых почвах.

18. Пухлые солончаки с хемогенными отложениями. Солянки и сарсазаны на солончаках.

19. Мокрые солончаки с озерно- хемогенными отложениями. Рогозово-тростниковая солянка на солончаковых почвах.

20. Бессточные эрозионно-денудационные котловины солончаков и такыров голоцена. Осачковые мятличники и бояличники на такыровидных почвах.

21. Поверхность конусов выноса с плосковолнистыми равнинами на аллювиально-пролювиальных отложениях среднеплейстоцена. Осачковые мятличники и культурная растительность на светлых и типичных сероземах.

22. Предгорные плоские слабоволнистые поверхности. Полынь, каррак, козыкулак-аккурай на светлых и типичных сероземах.

23. Плоские и слабонаклонные поверхности среднеплейстоценовые. Полынь раскидистая и осачково- мятличниковая формация озимой пшеницы на светлых сероземах.

24. Увалисто-холмистые адыры. Козыкулаково-карраковая формация на хрящеватых темных сероземах.

25. Изолированные антиклинальные возвышенности с элементами структурного рельефа значительно расчлененной поверхности палеогена. Эфемероидово-пырейная и осочково-мятличниковая формация на светлых сероземах.

26. Изолированные антиклинальные возвышенности, значительно расчлененные палеогеновые и меловые отложения. Полынно-эфемеровые сообщества на светлых сероземах.

27. Сильно расчлененные поверхности палеозойских и мезозойских пород. Арчевники с ксерофитным разнотравьем и смешанные кустарники на коричневых и дерново-бурых горно-лесных почвах.

28. Выравненные поверхности ниже- и среднепалеозойских пород. Пырейно-зверобойные и пырейно-разнотравные, на коричневых мелкоземистых горно-лесных почвах.

29. Поверхности палеозойских пород со скалистыми склонами и сильно расчлененными речными притоками. Разнотравно-типчаковые, эстрагонные, на горно-луговых и щебнистых почвах.

30. Поверхность выравненная, с формами ледниковой скульптуры и снежниками. Нагорных ксерофитов с вкраплением ковровых “альпийских” лужаек на щебнистых почвах; снежники и ледники.

Таким образом, мы ознакомились с технологией применения дистанционных материалов для составления ландшафтной карты и рассмотрели основные элементы ландшафтов Кашкадарьинской области, отдешифрированных с помощью многозональных комплектов. При использовании предлагаемой нами технологии необходимо учесть следующие:

Во-первых, для изучения морфоструктур элементов и внешних компонентов ландшафта с целью составления ландшафтных карт, наиболее эффективными являются космоматериалы, полученные в видимой части спектра (0,5-0,7 мкм), выполненные в летние и осенние сезоны года;

Во-вторых, в связи с естественной генерализацией на разномасштабных космоснимках, существенно меняется характер дешифрировочных признаков геоморфологических объектов и, соответственно, их информативность, следующим образом:

- на космоснимках мелкого масштаба уверенно выделяются крупные морфоструктурные элементы поверхности, отнесенные нами к классу ландшафтов;

- на космоснимках среднего масштаба оконтуриваются геоморфологические объекты, соответствующие таксономическим единицам подкласса и типов ландшафтов;

- на космоснимках крупного масштаба уверенно распознаются мелкие формы рельефа и их внешние компоненты, составляющие таксономические единицы рода и вида ландшафтов.

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*Джураева Г.Х., к.т.н.
доцент
кафедра “Технологических машин и оборудование”
Каршинский инженерно-экономический институт
Номозов М.А.
студент магистратуры
кафедра “Технологических машин и оборудование”
Каршинский инженерно-экономический институт*

МЕТОДЫ ПЕРЕРАБОТКИ НЕФТЯНЫХ УГЛЕВОДОРОДОВ

Аннотация. Вторичная нефтепереработка (вторичные процессы) представляет собой разнообразные процессы переработки нефтепродуктов, полученных методом прямой гонки. Эти процессы сопровождаются деструктивными превращениями содержащихся в нефтепродуктах углеводородов и изменением их природы, то есть являются химическими процессами.

Гидрокрекинг является одним из наиболее экологически чистых процессов нефтепереработки. В комплекс гидрокрекинга, как правило, входят установки очистки газов от сероводорода, регенерации кислых стоков и производства серы (серной кислоты), позволяющие полностью регенерировать и утилизировать технологические отходы.

Важнейшая особенность гидрокрекинга заключается в том, что в нем наряду с реакциями распада тяжелых углеводородов сырья, свойственными крекинг-процессу, протекают реакции гидрирования образовавшихся продуктов распада.

Ключевые слова: деструктив, нефтяные остатки, крекинг, алкан, нафтен, алкены, изомеризация.

*Djuraeva G.Kh., candidate of technical sciences
associate professor
Department of Technological Machines and Equipment
Karshi Engineering and Economic Institute
Nomofov M.A.
master's student
Department of Technological Machines and Equipment
Karshi Engineering and Economic Institute*

METHODS OF PROCESSING PETROLEUM HYDROCARBONS

Annotation. Secondary petroleum refining (secondary processes) is a variety of processes for processing petroleum products obtained by the direct race method. These processes are accompanied by destructive transformations of

hydrocarbons contained in petroleum products and changes in their nature, that is, they are chemical processes.

Hydrocracking is considered one of the most environmentally friendly oil refining processes. The hydrocracking complex, as a rule, includes installations for gas purification from hydrogen sulfide, regeneration of acid waste and the production of sulfur (sulfuric acid), allowing for the complete regeneration and disposal of process waste.

The most important feature of hydrocracking is that, along with the decomposition reactions of heavy hydrocarbons of the raw material characteristic of the cracking process, hydrogenation reactions of the resulting decomposition products occur.

Key words: destructive, oil residues, cracking, alkane, naphthene, alkenes, isomerization.

Главной особенностью отрасли нефтехимического и основного органического синтеза является многовариантность путей получения одного и того же конечного продукта. При этом могут быть использованы различные источники сырья, в то же самое время один вид сырья может быть использован для получения различных продуктов.

Нефть – уникальное невозполнимое природное богатство. Рациональное использование «черного золота» является важнейшей государственной задачей. Таким образом, необходимо повысить глубину переработки за счет более полного извлечения топливных фракций из нефти при ее первичной перегонке, подбора наиболее благоприятного состава топливных продуктов (бензин, реактивное топливо, дизельное топливо), а самое главное, за счет развития деструктивных процессов переработки нефтяных остатков с получением ценных топливных и нефтехимических продуктов.

Вторичная нефтепереработка (вторичные процессы) представляет собой разнообразные процессы переработки нефтепродуктов, полученных методом прямой гонки. Эти процессы сопровождаются деструктивными превращениями содержащихся в нефтепродуктах углеводородов и изменением их природы, то есть являются химическими процессами.

Важнейшими из вторичных процессов является термический и каталитический крекинг, риформинг, алкилирование, коксование и гидроочистка нефтепродуктов.

При температуре крекинга в первую очередь деструкции подвергаются алканы и нафтены преимущественно с высокой молекулярной массой, а наиболее устойчивыми являются ароматические углеводороды и алкены. В результате в продуктах крекинга накапливаются ароматические углеводороды и низшие алкены, которые затем вступают во вторичные реакции полимеризации.

Особую разновидность крекинг-процессов представляет гидрокрекинг, он относится к так называемым гидрогенизационным процессам нефтепереработки. Гидрокрекинг позволит создать оптимальные схемы переработки нефти с максимальным выходом и требуемым ассортиментом моторных топлив.

Гидрокрекинг является одним из наиболее экологически чистых процессов нефтепереработки. В комплекс гидрокрекинга, как правило, входят установки очистки газов от сероводорода, регенерации кислых стоков и производства серы (серной кислоты), позволяющие полностью регенерировать и утилизировать технологические отходы. Топливом для печей служит очищенный от сероводорода собственный газ процесса.

Процесс проводится в среде водорода при высоких температур 260–450 °С и давлении 5–20 МПа, в присутствии бифункциональных катализаторов, катализирующих одновременно реакции расщепления, изомеризации и гидрирования углеводородов.

Гидрокрекинг очень гибкий процесс. Сырьем процесса является тяжелые нефтяные дистилляты, нефтяные остатки (мазут, гудрон), тяжелые и высокосернистые нефти.

Процесс гидрокрекинга остатков имеет в настоящее время два направления: 1) гидрообессеривание мазутов с целью получения маловязкого и малосернистого котельного топлива или сырья для каталитического крекинга; 2) углубленный гидрокрекинг с целью получения дополнительных ресурсов моторных топлив.

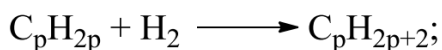
Важнейшая особенность гидрокрекинга заключается в том, что в нем наряду с реакциями распада тяжелых углеводородов сырья, свойственными крекинг-процессу, протекают реакции гидрирования образовавшихся продуктов распада.

Основными реакциями при гидрокрекинге являются:

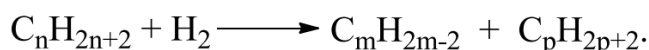
1. Деструкция высокомолекулярных алканов:



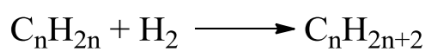
деструкция высокомолекулярных алкенов



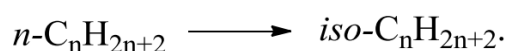
дегидрирование продуктов деструкции:



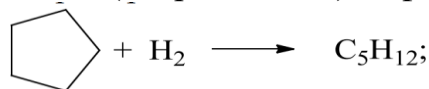
2. Гидрирование алкенов сырья, что в условиях гидрокрекинга термодинамически более вероятно, чем их полимеризация и циклизация:



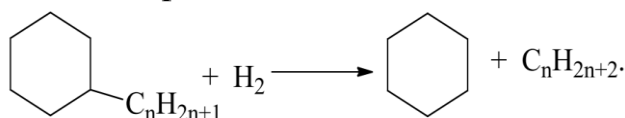
3. Изомеризация алканов:



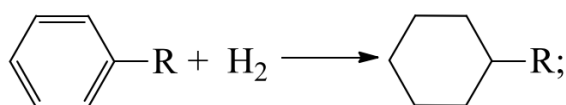
4. Распад, дециклизация (гидрогенолиз) нафтенов, например:



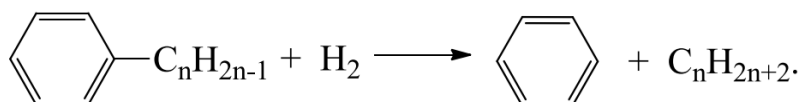
и деалкилирование нафтенов



5. Деалкилирование ароматических углеводородов:



и гидрирование ароматических углеводородов:



При гидрокрекинге, в отличие от каталитического крекинга, легче всего вступают в превращения ароматические полициклические соединения и образуются с высоким выходом легкие насыщенные углеводороды, в том числе изостроения. При этом одновременно с реакциями углеводородной части сырья, происходит гидрирование и удаление неуглеводородных соединений- гидроочистка нефтепродуктов.

В целом применение гидрокрекинга позволяет повысить глубину нефтепереработки нефти и получить бензин высокого качества, не содержащий сернистых соединений.

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*Дорожкина Т.С.
Федеральное государственное бюджетное образовательное
учреждение высшего образования
«Оренбургский государственный университет»
Россия, г.Оренбург*

ПРОЦЕССУАЛЬНЫЕ СПОСОБЫ КОНТРОЛЯ И НАДЗОРА ЗА ЗАКОННОСТЬЮ ПРОИЗВОДСТВА СЛЕДСТВЕННЫХ ДЕЙСТВИЙ

Аннотация. В рамках представленных тезисов выделяются процессуальные способы контроля и надзора за законностью производства следственных действий. Рассматривается роль прокурорского надзора, как одного из наиболее распространенных способов. Представлены особенности реализации контроля и надзора в соответствии с развитием следственных действий.

Ключевые слова: следственные действия, прокурорский надзор, законность производства, судебный контроль, формы надзорной деятельности.

*Dorozhkina T.S.
Federal State Budgetary Educational Institution of Higher Education
"Orenburg State University"
Russia, Orenburg*

PROCEDURAL WAYS OF CONTROL AND SUPERVISION OF THE LEGALITY OF INVESTIGATIVE ACTIONS

Abstract. Within the framework of the presented theses, procedural methods of control and supervision over the legality of investigative actions are highlighted. The role of prosecutorial supervision is considered as one of the most common methods. The features of the implementation of control and supervision in accordance with the development of investigative actions are presented.

Keywords: investigative actions, prosecutor's supervision, legality of proceedings, judicial control, forms of supervisory activity.

Производство следственных действий является основным способом собирания доказательств по уголовному делу для установления обстоятельств, подлежащих доказыванию, связанных с предположением и выводами о виновности лица в совершении преступления и необходимости привлечения его к уголовной ответственности либо непричастности к преступлению.

Следственные действия – это мероприятия, проводимые следователями и оперативными работниками для сбора доказательств в

уголовном деле. К ним относятся допросы свидетелей, потерпевших и обвиняемых, осмотр места происшествия, изъятие вещественных доказательств, проведение экспертиз и другие меры. Цель следственных действий – установление обстоятельств дела, выявление виновных и обеспечение доказательной базы для судебного разбирательства. Однако при проведении следственных действий необходимо соблюдать процессуальные права граждан, чтобы избежать нарушений и ошибок в уголовном процессе [4].

В настоящее время в качестве процессуальных способов контроля и надзора за законностью производства следственных действий возможно выделить:

1. Судебный контроль – осуществляется судами по ходатайству участников уголовного процесса или по инициативе суда. Судебный контроль может быть оспорительным (при рассмотрении жалоб на действия следователя, прокурора или судьи) и безосновательным (при проверке законности принятых решений).

2. Прокурорский надзор – осуществляется прокуратурой в целях обеспечения законности и правопорядка. Прокурорский надзор может быть предупредительным (предупреждение о возможных нарушениях закона) и реагированием на нарушения закона (возбуждение уголовного дела, направление жалобы на действия следователя).

3. Контроль за действиями следователя – осуществляется вышестоящим следователем или прокурором. Контроль может быть плановым (проверка законности действий следователя в рамках уголовного дела) и внеплановым (проверка по жалобе на действия следователя).

4. Контроль за действиями оперативных служб – осуществляется вышестоящими органами управления оперативной деятельности. Контроль может быть плановым (проверка законности действий оперативных служб в рамках уголовного дела) и внеплановым (проверка по жалобе на действия оперативных служб).

5. Обращение в суд – гражданин может обратиться в суд с жалобой на действия следователя или оперативных служб в рамках уголовного дела. Суд рассматривает жалобу и принимает решение о ее удовлетворении или отклонении.

6. Обращение в прокуратуру – гражданин может обратиться в прокуратуру с жалобой на действия следователя или оперативных служб в рамках уголовного дела. Прокуратура рассматривает жалобу и принимает решение о возбуждении проверки или об ее отклонении.

Перечисленные способы и формы контроля и надзора в отдельных случаях в своей основе имеют одинаковые субъекты, в частности, органы прокуратуры, но при этом существующие способы инициирования надзорной деятельности могут отличаться.

Отмечая высокую значимость органов прокуратуры для соблюдения прав участников и законности процессуальных действий, важно выделить особенности надзорной деятельности прокуратуры.

Прокурорский надзор за законностью производства следственных действий является одним из важных средств обеспечения допустимости доказательств, с целью получения которых выполняются следственные действия, а также соблюдения законных прав граждан на досудебных стадиях уголовного судопроизводства.

Прокурор осуществляет надзор за законностью производства следственных действий, включая обыск, задержание, арест, допрос и другие мероприятия. Он проверяет соблюдение прав граждан и законных интересов общества при проведении этих мероприятий, а также требует от следственных органов предоставления достаточных доказательств для возбуждения уголовного дела.

Прокурор также контролирует соблюдение правил допроса подозреваемых и обвиняемых, в том числе права на защиту и неприкосновенность личности. Он требует от следственных органов соблюдения процессуальных сроков и правил проведения следственных действий.

В настоящее время законодательно установлены следующие варианты надзора и контроля в рамках следственных действий:

1. Реализация надзора на этапе получения разрешения суда на проведение следственных действий. В данном случае в рамках УПК РФ устанавливаются ограничения, определяющие перечень следственных действий, разрешенных под судебным контролем, то есть, после получения соответствующего разрешения с участием органов прокуратуры. Соответствующие нормы отражены в ч. 2 ст. 29, ч 1-4 ст. 165 УПК РФ. На данном этапе прокурорский надзор реализуется совместно с судебным контролем.

2. В случаях, когда следственные действия подразумевают потребность в немедленной реализации ввиду обстоятельств и интересах следствия, у следователя существует возможность, в соответствии с ч. 5 ст. 165 УПК РФ, заменить судебное решение на собственное постановление. Но при этом судебный контроль и прокурорский надзор данных следственных действий реализуется постфактум, то есть уже после их совершения в полном объеме в течение 24 часов.

3. Комплекс следственных действий при наличии достаточных оснований может проводиться вне судебного контроля, но при этом важно отметить, что часть из них требует вынесения соответствующих постановлений, а в случае возражений одной из сторон – решение суда. Примером подобных действий, которые могут быть реализованы с участием и без участия суда является эксгумация. В случае возражений

родственников покойного, данное действие требует судебного вмешательства [2].

Важно отметить, что надзор и контроль в рамках следственных действий со стороны органов прокуратуры и суда в значительной степени зависит от потенциальной возможности нарушения прав и свобод граждан. Например, обыск и выемка из нежилых помещений в значительно меньшей степени несут в себе риск нарушения прав и свобод гражданина, что определяет возможность реализации подобных действий без предварительного и последующего судебного контроля.

При этом в современном законодательстве, заменив санкцию прокурора на проведение ряда следственных действий согласием суда, возможно назвать решение вопроса о проведении других следственных действий целиком компетенцией следователя. Кроме того, важно учитывать особенности и субъектно-объектную базу следственных действий, так как она определяет возможности и потребность в усилении надзора. Подобным примером могут являться нормы закона, в частности, ч. 3 ст. 183 УПК РФ, согласно которой, выемка документов, содержащих государственную или иную, охраняемую федеральным законом тайну, производится следователем с санкции прокурора [1].

Отдельное внимание в рамках прокурорского надзора уделяется резонансным делам, следственные действия по которым органы прокуратуры обязаны контролировать с целью повышения оперативности в исследовании всех обстоятельств. В подобных случаях надзор не ограничивается только получением оперативных данных от следственной группы, а включает в себя также разработку мер, направленных на формирование оптимальной модели следственных действий.

Кроме того, прокурорский надзор в рамках следственных действий напрямую связан с качеством материалов, передаваемых в суд для обоснования ходатайства о производстве следственного действия. Каждый из видов контроля за процессуальной деятельностью следователя по производству следственных действий, дополняют друг друга и усиливают его, имея вместе с тем различные задачи и различные формы. Деятельность прокурора в этой части его полномочий является публичной, связана с законностью уголовного преследования и защитой общественных интересов, прежде всего, также с обеспечением прав и свобод конкретных участников уголовного судопроизводства.

Надзорная деятельность прокурора состоит в контроле за соблюдением закона в ходе следственных действий и других процессуальных действий, проводимых правоохранительными органами. Он имеет право требовать от правоохранительных органов предоставления информации о ходе следственных действий и других процессуальных мероприятий, а также может принимать меры по пресечению нарушений

закона. В целом, надзорная деятельность прокурора направлена на обеспечение законности и справедливости в уголовном процессе.

В свою очередь суд, рассматривающий ходатайство о производстве следственного действия, не относится ни к одной из сторон состязательного уголовного процесса, его решение основано на изучении представленных в суд материалов и на доводах участников судебного заседания.

Судьи могут отменять незаконные решения следственных органов и обеспечивать защиту прав и свобод граждан в рамках уголовного процесса. В целом, судебный контроль является необходимым элементом правового государства и гарантией справедливости в уголовном процессе.

Цель судебного контроля законности производства следственных действий заключается в защите прав и свобод граждан, а также в обеспечении справедливости и законности в сфере правосудия. Судебный контроль должен гарантировать, что следственные действия были проведены в соответствии с законом, а также что права и интересы подозреваемых, обвиняемых и других участников уголовного процесса не были нарушены. Кроме того, судебный контроль направлен на предотвращение злоупотреблений со стороны правоохранительных органов и обеспечение ответственности за неправомерные действия. В целом, цель судебного контроля законности производства следственных действий состоит в обеспечении справедливости и законности в уголовном процессе.

Важной особенностью надзорной деятельности в рамках следственных действий является то, что прокурор является единственным участником уголовно-процессуальной деятельности на всех ее этапах – от принятия сообщения о преступлении до исполнения приговора.

С момента подписания следователем и руководителем следственного органа обвинительного заключения их власть над обвинением заканчивается. В качестве аргумента достаточно указать на то, что в это время заканчивается и срок предварительного расследования. Переход всей полноты обвинительной власти к прокурору означает, что он получает право и возможность распоряжаться обвинением по своему усмотрению – передавать дело на рассмотрение суда, прекращать уголовное преследование, менять объем обвинения и его уголовно-правовую квалификацию [5].

Таким образом, контроль и надзор за законностью производства следственных действий являются важным инструментом обеспечения прав и свобод граждан, а также защиты интересов государства в сфере правосудия. Неправомерные действия следователя или оперативных служб могут привести к нарушению прав граждан, несправедливому обвинению или оправданию подозреваемых, а также к ухудшению репутации правоохранительных органов и снижению доверия к ним со стороны общества. Поэтому контроль и надзор за законностью производства

следственных действий должны быть осуществлены соответствующими органами и должны быть эффективными и надежными.

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Ендирбоева М.О.
студент магистратуры
специальность «Экология»
Матмуратов М.А., доктор философии по биологическим наукам
(PhD)
Каракалпакский государственный университет им. Бердаха
Республика Узбекистан

ВИДОВОЕ РАЗНООБРАЗИЕ МАКРОЗООБЕНТОСОВ ОЗЕРА САЙКУЛЬ

Аннотация. В статье рассмотрены видовое разнообразие макрозообентосов озера Сайкуль. В озере Сайкуль отмечен 41 вид макрозообентоса: Annelida

- 2 вида, Mollusca - 11 видов, Crustacea – - 2 вида, Heteroptera - 2 вида, Odonata - 4 вида, Chironomidae - 10 видов, Coleoptera - 5 видов, Trichoptera - 1 вид, другие представители двукрылых - 4 вида.

Ключевые слова: вид, макрозообентос, двукрылые, хирономид, компонент, род, водоём, озеро.

Endirboeva M. O.
master's student majoring in Ecology
Matmuratov M.A., doctor of philosophy in biological sciences (PhD)
Karakalpak State University named after. Berdah
The Republic of Uzbekistan

SPECIES DIVERSITY OF MACROZOOBENTHOS IN LAKE SAYKUL

Annotation. The article examines the species diversity of macrozoobenthos of Lake Saikul. 41 species of macrozoobenthos were recorded in Lake Saikul: Annelida

- 2 species, Mollusca - 11 species, Crustacea - - 2 species, Heteroptera - 2 species, Odonata - 4 species, Chironomidae - 10 species, Coleoptera - 5 species, Trichoptera - 1 species, other representatives of Diptera - 4 species.

Key words: species, macrozoobenthos, diptera, chironomid, component, genus, reservoir, lake.

Среди изученных водоёмов разных типов озеро Сайкуль занимает первое место по разнообразию макрозообентосов. В этом озере разнообразие моллюсков, двукрылых и твердокрылых за исключением хирономид, велико по сравнению с другими озерами. Однако разнообразие личинок хирономид уменьшилось.

В озере зарегистрировано 2 вида кольчатых червей: *Limnodrilus helveticus* и *Paranais simplex*. Всего в 6 озерах, принятых в качестве водоёмов разного типа, зарегистрировано 18 видов моллюсков, из них 14 видов отмечены также в озере Сайкуль.

Однако разнообразие моллюсков в других озерах не превышает 6 видов. Такие виды моллюсков, как *Cerastoderma isthmicum*, *Colletopterum cyreum*, *Dreissena polymorpha* и *Theodoxus pallasii*, в Сайкуле не отмечены. Однако виды *Lymnaea* sp., *Lymnaea stagnalis* и *Castatella Fontinalis* уникальны для этого озера и не встречаются в других озерах.

Из ракообразных *Turkogammarus aralensis*, который встречается во всех вышеперечисленных озерах, в Сайколе не зарегистрирован.

В озере Сайкуль распространены виды ракообразных *Paramysis lacustris* и *Macrobrachium nipponense*. Также были зарегистрированы *Sigara assimilis* и *Corixidae* sp. Также в озере были обнаружены личинки двукрылых насекомых (Diptera) (от 10 видов), стрекоз (от 6 видов), бабочек и клещей (от 5 видов), жуков (от 4 видов), подсолнечников (от 2 видов).

Интересно, что, хотя это озеро занимает первое место по разнообразию макрозообентоса, оно занимает последнее место по разнообразию личинок хирономид – основного компонента макрозообентоса.

В этом озере зарегистрировано всего 10 видов хирономид. По видовому разнообразию, численности особей и биомассе в макрозообентосе доминирует семейство Chironomidae (Chironomidae) семейства Diptera. Выявлено 54 вида хирономид, принадлежащих к 26 родам. Типичные для всех озер виды хирономид *Tanytarsus staty*, *Procladius Ferrugineus* и *Cryptocladopelma defektus* в этом водоеме вообще не встречаются. Однако видов, принадлежащих к другим семействам двукрылых, больше, чем в других озерах. Среди них виды *Prodezzia semigra* и *Sphaeromias pictus* встречаются только в озере Сарбас, за исключением Сайкуль.

В этом озере отмечен единственный общий для всех озер вид *Oecetis intima*. В озере также обнаружены все 5 видов водяных жуков, зарегистрированных в 6 озерах различного качества водоемов.

Следует отметить, что из-за высокого разнообразия в озере Сайкуль происходит снижение уровня доминирования видов, в связи с чем уменьшается количество доминирующих видов.

Численность макрозообентоса увеличивается в зимний сезон. Немного в весенние месяцы, в среднем летом, но чаще встречается в осенний сезон, чем в летний. Биомасса показывает высокий показатель от зимних к весенним месяцам, в летние месяцы он резко падает, а в осенние месяцы сохраняется в среднем по годам.

Зимой средняя за сезон численность 156 экз/м², биомасса 4,5 г экз/м². Показания в весенние месяцы - 420 и 120, в летние - 240 и 3,4, в осенние - 86 экз/2,3 г/м². Среднегодовая биомасса составляет 6,4 г/м².

В зависимости от года и сезона здесь могут доминировать около 10 видов. Доминирующие виды включают *Limnodrilus helveticus*, *Anisus albus*, *Anisus sp*, *Lymnaea auricularia*, *Lymnaea stagnalis*, *Paramysis lacustris*, *Sigara assimilis*, *Camptochironomus pallidivittatus*, *Chironomus cingulatus*, *Cricotopus silvestris*, *Tanytarsus exigious* и *Berosus sp*.

Таким образом, в озере Сайкуль отмечен 41 видов макрозообентоса, которые по основным таксонам распределились следующим образом: Annelida

- 2 вида, Mollusca - 11 видов, Crustacea – 2 вида, Heteroptera - 2 вида, Odonata - 4 вида, Chironomidae - 10 видов, Coleoptera - 5 видов, Trichoptera - 1 вид, другие представители двукрылых - 4 вида. Число доминирующих видов – 10.

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*Ешонқулов А.Қ.
Самарқанд иқтисодиёт ва сервис институти
Бухгалтерия ҳисоби кафедраси ассистенти*

КОРХОНАЛАРДА ПУЛ ОҚИМИ ТУҒРИСИДАГИ ҲИСОБОТИНИ МОЛИЯВИЙ БУХГАЛТЕРИЯ ЖАДВАЛЛАР АСОСИДА ШАКЛИНИ КУРИБ ЧИҚИШ

Аннотасия: мақолада "пул оқимлари тўғрисидаги ҳисобот" шаклини шакллантириш эволюцияси, шунингдек, бухгалтерия (молиявий) ҳисоботларининг турли хил фойдаланувчилари учун ўзбек ва халқаро стандартларга мувофиқ унинг роли ва мақсади кўриб чиқилади. Ҳисобот усулларининг таҳлили шуни кўрсатдики, ички ҳисобот фойдаланувчилари учун бевосита усул мақбулдир.

Калит сўзлар: нақд пул, ҳисобот, фойдаланувчилар, халқаро стандартлар, жорий фаолият, инвестицион фаолият, молиявий фаолият, пул эквивалентлари.

*Eshankulov A.K.
assistant
Department of Accounting
Samarkand Institute of Economics and Service*

PREPARATION OF CASH FLOW STATEMENTS IN ENTERPRISES ON THE BASE OF FINANCIAL ACCOUNTING TABLES

Abstract. The article examines the evolution of the "cash flow statement" form, as well as its role and purpose in accordance with Uzbek and international standards for various users of accounting (financial) reports. The analysis of reporting methods showed that the direct method is acceptable for internal reporting users.

Key words: cash, reporting, users, international standards, current activity, investment activity, financial activity, cash equivalents.

Миллий иқтисодиётда ислохотларни чуқурлаштириш ва иқтисодиётни еркинлаштириш молиявий ресурслардан самарали фойдаланишни, хусусан, ҳисоб миллий ва халқаро стандартлар асосида пул оқимларини бошқариш усулларини такомиллаштиришни талаб этади. Фаолият тури (операцион, инвестиция, молиявий) томонидан молиявий ресурслар ҳаракати тўғрисидаги маълумотларни акс еттириш учун, молиявий ҳисобот таркиби бир "пул оқими ҳисоботи" (шакл Но. 4) сифатида ишлаб чиқилган. Ушбу ҳисобот шакли бизнинг амалиётимиз учун нисбатан янги бўлиб, ҳозирги вақтда кўп ҳолларда фақат 5110 ҳисобида тўлдирилади.

Хўжалик юритувчи субъектларнинг кўпчилигида "пул оқимлари тўғрисидаги ҳисобот"нинг моҳияти, мақсади, ахборот имкониятлари ва тўлдириш усулларига еътибор қаратилди. Шунинг учун тавсияноманинг ушбу бўлимида мазкур ҳисоботни ишлаб чиқаришнинг миллий ва миллий ўзига хос хусусиятлари ва унинг бошқарувга ахборот беришдаги аҳамияти баён қилинади.

Пул оқими жадвалини (шакл сонли 4) бухгалтерия ҳисоби асосий шаклларида бири ҳисобланади, компания маблағлари даромад ва харажатлар ҳақида маълумот умумлаштириш учун ишлатилади қайси. Бухгалтерия ҳисоби ядросини ташкил етувчи маълумотларни сезиларли даражада тўлдиради ва бойитади - "баланс" (1-шакл) ва "молиявий натижалар тўғрисида ҳисобот" (2-шакл). Маълумки, "баланс" (1-шакл) корxonанинг молиявий ҳолатини маълум бир санада (ҳисобот даври охирида) акс еттиради. Пул оқими тўғрисидаги ҳисобот (4-шакл) молиявий ҳисоботларнинг таркибий қисмларидан бири бўлиб, ҳисобот даврининг бошидан охиригача пул оқимларидаги ўзгаришларни тасвирлайди.

Молиявий натижалар тўғрисидаги ҳисобот (шакл йўқ. 2) корxonанинг ҳисобот давридаги молиявий-хўжалик фаолияти натижаларини акс еттиради. Бу фаолият нақд ҳолатини таъсир қилувчи муҳим омил ҳисобланади, пул оқими белгисида айтилганидек (шакл Но. 4). Пул оқими ҳақида маълумот жуда муҳим, чунки у молиявий ҳисоботларни фойдаланувчиларга нақд ва нақд пул эквивалентларини ошириш ва ишлатиш қобилиятини баҳолашга имкон беради. Бу ерда нақд пул ва пул эквивалентлари тушунчасига батафсилроқ тўхталамиз. Халқаро молиявий ҳисобот стандартлари (УФРС) ва АҚШ умумий бухгалтерия тамойиллари (УС ГААП) бўйича нақд пул корxона ва талаб бўйича инвестициялар томонидан нақд пулдан иборат.

НСБ сонли 9 "пул оқими жадвалидан" га мувофиқ, нақд пул эквивалентлари қисқа муддатли юқори ликвидли инвестициялар (молиявий инвестициялар) бўлиб, улар маълум миқдордаги пулларга осон ва тез алмаштирилади, шунингдек қийматнинг ўзгариши туфайли маълум бир хавфга ега.

Бу шуни англатадики, нақд пул эквивалентлари юқори ликвидли қисқа муддатли молиявий инвестициялар бўлиб, маълум миқдорга осонлик билан айланади ва қийматнинг ўзгариши хавфига деярли таъсир қилмайди. Улар хазина облигациялари, муддатли депозитлар, депозит сертификатлари ва шунга ўхшашларни ўз ичига олиши мумкин.

Пул оқимлари тўғрисидаги ҳисоботни тузишда (4-шакл) пул маблағлари ва пул эквивалентлари жамланади ва суммада ҳисобга олинади. Молиявий инвестицияларни пул эквивалентлари шаклида сотиб олиш ва сотиш маблағларни ишлатиш манбаи ёки усули емас, балки корxonани бошқариш жараёнининг бир қисмидир. Корxonадан инвесторга пул

маблағларининг берилиши ва қайтарилиши пул оқимлари тўғрисидаги ҳисоботда акс еттирилмайди (4-шакл).

Пул оқимлари тўғрисидаги ҳисоботда пул оқимларининг таснифи. Пул оқимлари тўғрисидаги ҳисоботда пул оқимлари ва оқимлари асосан уч тоифага бўлинади: операцион фаолият, инвестиция фаолияти ва молиялаштириш фаолияти. Пул оқимларини ушбу тоифаларга гуруҳлаш корхонанинг учта асосий фаолиятидан ҳар бирининг нақд пулга таъсирини акс еттиришга имкон беради. Учта тоифанинг нақд пулга таъсири нақд пул қолдиқларини очиш ва ёпиш даври мобайнида аниқ ўзгаришни англатади.

Нос сонли 9 иловага мувофиқ" пул оқими жадвалидан " (шакл 4), операцион фаолияти бўлган асосий даромад хўжалик юритувчи субъектнинг фаолияти, шунингдек, инвестиция ва молиявий фаолияти билан боғлиқ бўлмаган бошқа хўжалик фаолиятибор.

Одатда, корхонанинг фаолият (асосий) фаолияти маҳсулот, иш ва хизматларни сотишга қаратилади. Операцион фаолиятдан пул оқимлари субъектнинг инвестиция ва молиялаштириш фаолияти таркибига кирмайдиган барча операсияларни ўз ичига олади.

Жадвал 1

Нақд пул тушумлари	нақд тўловлар
сотилган товарлар (ишлар, хизматлар) учун харидорлардан тушумлар	Пайменс Таъминотчиларга тўловлар таъминотчиларга тўловлар
операцион фаолиятдан олинган бошқа даромадлар	Каш паид ходимларга тўланган пул маблағлари операцион фаолият билан емплоеес
	Отхер ревенуес боғлиқ бошқа даромадлар

Операцион фаолият билан боғлиқ пул тушумлари ва тўловлар

Инвестиция фаолияти-пул эквивалентларига киритилмаган узок муддатли активларни ва бошқа инвестиция объектларини сотиш ва сотиб олишдан иборат фаолият.

Шундай қилиб, асосий воситалар, номоддий активлар ва бошқа узок муддатли активларнинг олди-сотдиси инвестиция фаолиятининг асосий таркибий қисмидир. Тегишли пул тушумлари ва чиқимлари пул оқимлари тўғрисидаги ҳисоботнинг инвестиция фаолияти бўлимида акс еттирилади (4-шакл). Инвестиция фаолияти билан боғлиқ пул оқими маълумотлари муҳимдир, чунки пекйпкахкелажакда пул оқимларини яратиш ва пул оқимларини яратиш учун кутилган пекйпкахга еътибор қаратиш учун мўлжалланган.

НАС 9-сонли "пул оқимлари тўғрисидаги ҳисобот" (4-шакл) га мувофиқ, молиявий фаолият корхона фаолияти натижасида капитал ва қарз миқдори ва таркибини ўзгартириши мумкин бўлган фаолиятдир.

Флов оф фондс Инвестисия фаолияти билан боғлиқ маблағлар оқими

Нақд пул тушумлари	нақд тўловлар
асосий воситаларни йўқотишдан олинган даромад	асосий воситаларни сотиб олиш
асосий воситаларни сотиб олиш номоддий активларни сотишдан олинган	даромад номоддий активларни
сотиб олиш узок муддатли ва қисқа муддатли инвестисияларни	сотиб олиш узок муддатли ва қисқа муддатли инвестисияларни
сотиб олиш бошқа инвестисия фаолиятини сотишдан олинган даромад инвестисия фаолиятидан бошқа	пул тўловлари

Д
Й

емак, молиявий фаолият натижасида сомпозицион компаниянинг ўзлик ва мажбуриятларининг ҳажми ва омпозицияси ўзгаради. Бундай фаолиятдан келиб чиққан пул оқимлари пул оқимлари тўғрисидаги ҳисоботнинг молиявий фаолият бўлимида акс еттирилади (4-шакл). Шунинг учун молиялаштириш фаолияти билан боғлиқ пул оқимлари ҳақидаги маълумотлар зарур, чунки у келажакдаги пул оқимларини башорат қилишга имкон беради.

Фаолиятни молиялаштириш пул оқимлари

Нақд пул тушумлари	нақд пул тўловлари
фоизлар олинган	фоизлар тўланган
дивидендлар олинган	дивидендлар тўланадиган
даромадлар чиқарилган аксиялардан берилган аксияларга	чиқарилган аксияга пул тўловлари
узок муддатли кредитлар даромад	нақд тўловлар узок муддатли кредитлардан олинган даромадлар узок муддатли кредитлардан олинган
даромадлар узок муддатли ижарадан	олинган даромадлар
бошқа пул тушумлари	бошқа пул тўловлари

Шундай қилиб, халқаро молиявий ҳисобот стандартлари (ИФРС) ва миллий стандартлар ўртасидаги асосий фарқ шундаки, УФРС бўйича молиявий фаолият қисқа муддатли инвестисиялар каби узок муддатли инвестисияларни ўз ичига олади.

Ҳозирги вақтда миллий стандартлар молиявий фаолиятга фақат қисқа муддатли инвестицияларни назарда тутлади. Ошкор муносабати билан УФРС асосланган пул оқимларини бир баёнот тайёрлашда, у молиявий фаолияти тегишли таърифларни фойдаланиш тавсия етилади

Нақд пулсиз операсиялар. Кўпгина фаолият турлари пул оқимларига таъсир қилади ва натижада ҳисоботда уларнинг турлари бўйича бўлим мавжуд. Шу билан бирга, операсион, инвестиция ва молиялаштириш фаолияти билан боғлиқ айрим операсиялар пул оқимларига таъсир қилмайди. Моддий ва номоддий активларни конвертасия қилиш учун акциялар ва облигасиялар чиқариш ёки узоқ муддатли активларни бошқа узоқ муддатли активларга айлантириш нақд пулсиз инвестиция ва молиявий операсияларга мисол бўлиши мумкин. Нақд пулсиз операсиялар асосий фаолият билан боғлиқ бартер операсияларида намоён бўлиши мумкин. Баъзи корхоналарда нақд пулсиз операсияларнинг бу тури савдо операсияларининг асосий қисмини ташкил қилиши мумкин. Шунинг учун, бизнинг назаримизда, нақд пул иштирокисиз битимларни (айниқса бартер операсияларини) тўғри очиб бериш пул оқимлари тўғрисидаги ҳисоботни тайёрлаш ва таҳлил қилишда муҳим аҳамиятга ега.

Умуман пулни жалб қилмайдиган инвестиция ва молиявий операсиялар келажакдаги пул оқимларига таъсир қилади. Нақд пулсиз операсиялар бўйича маълумот пул оқими ҳисоботида илова сифатида тақдим етилишини таклиф қиламиз.

Ҳозирги вақтда бухгалтерия ҳисоби миллий стандартлари нақд пулсиз инвестиция ва молиявий операсиялар ва асосий фаолият ҳақида маълумот беришни талаб қилмайди.

Бухгалтерия ҳисоби нақд пул асосида амалга оширилганда даромадлар нақд пул олинганда ва харажатлар улар тўланганда ҳисобга олинади. Бу корхона фаолият пул оқимлари ҳақида ўйлаш учун зарур бўлса, бу тартиби, аниқса, фойдалидир. Аслида, корхона фаолият пул оқимлари соф натижа пул усули билан ҳисоблаб, унинг фойда тенгдир. Операсион фаолиятдан олинган пул оқимларининг соф оқимини ҳисоблаш учун базавий базани ҳисоблаш усулини касса усулига ўзгартириш керак.

Операсион фаолиятни ҳисоблашнинг тўғри усули нақд пул тушумлари ва тўловларининг асосий тоифаларини ҳисобга олади ва моҳиятан нақд пул асосида тайёрланган даромад белгисига ўхшайди. Тўғри бухгалтерия усулини қўллаш орқали турли тоифадаги нақд пул суммаларини қайта ҳисоблаб чиқинг, ёки корхонанинг нақд пулини таҳлил қилиш ва таснифлаш орқали, ёки нақд пул асосида ҳисобланган даромад ва харажатлар, нақд пул асосида ҳисоблаб чиқилади, тегишли миқдорларга конвертасия қилиш йўли билан аниқланиши мумкин.

Кўпгина корхоналар жуда катта миқдордаги пул оқимларига ега бўлиб, бу операсион фаолиятдан пул оқимларини таҳлил қилиш ва таснифлашни жуда қийинлаштиради. Дедуксия тамойилига кўра, энг

самарали усул бухгалтерия ҳисобида акс еттирилган суммаларни асос қилиб олишдир.

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Жалилов Ў.А.
Жиззах политехника институти
“Энергетика” кафедраси ассистенти

**ЭЛЕКТР ТАЪМИНОТИ ИШОНЧЛИГИНИ ОШИРИШДА
ҚЎЛЛАНИЛАДИГАН ИСТИҚБОЛЛИ ЭНЕРГИЯ ЗАХИРАЛАШ
ҚУРИЛМАЛАРИНИ ЎҚИТИШ ЖАРАЁНИДАГИ ТАҲЛИЛИ**

Аннотация. Мақолада энергетик тизимда энергия захиралаш қурилмаларидан фойдаланиш долзарблиги, уларнинг турлари, афзаллик ва камчиликлари кўрсатилган. Энергия захиралаш қурилмаларининг техник ва иқтисодий хусусиятлари таҳлил қилинган. Олиб борилган таҳлиллار асосида республикамиз иқлимига мос, аҳолининг ижтимоий-иқтисодий ҳолатига тўғри келадиган энергия захиралаш қурилмалари танлаб олинган. Бундан ташқари ҳозирги кунда республикамиздаги электр энергияси нархидан, энергия захиралаш технологияларидан олинган электр энергияси нархига яқин ёки паст бўлган қурилмалар тавсия қилинган.

Калит сўзлар: ахборот технологиялари, интеллектуал, техник компетенция, технологик таълим.

Jalilov O'.A.
assistant
"Energy" department
Jizzakh Polytechnic Institute

**ANALYSIS OF PROSPECTIVE ENERGY STORAGE DEVICES USED
IN IMPROVING ELECTRICAL SUPPLY RELIABILITY IN THE
PROCESS OF TRAINING**

Annotation. The article shows the relevance of using energy backup devices in the power system, their types, advantages and disadvantages. The technical and economic characteristics of energy-saving devices are analyzed. Based on the analysis, energy-saving installations were selected that correspond to the climate of the republic, the socio-economic situation of the population. In addition, devices whose cost is close to or lower than the cost of electricity obtained from energy-saving technologies are currently recommended.

Keywords: information technology, intellectual, technical competence, technological training.

Энергияни захиралаш ҳар қандай тизимнинг ажралмас қисми ҳисобланиб табиатда жуда кенг тарқалган. Ҳар қандай жисмнинг мавжуд бўлиши аслида унинг таркибидаги энергиянинг бир тизим сифатида бирлашганини билдиради. Масалан инсоннинг тириклиги ёки

ҳаракатланиши унинг танасидаги молекулаларнинг кимёвий энергияни сақлай олиши аниқлади, агар ушбу кимёвий энергия молекулаларда сақланмаса тана ҳалокатга учрайди ва тизим ишдан чиқади. Инсоннинг кучсизланиб қолиши ҳам аслида молекулалардаги кимёвий энергиянинг камайиши сабабли юзага келади. Бошқа материяларда ҳам худди шундай жараён кузатилади.

Энергия захиралаш қурилмаларидан фойдаланиш айниқса қайта тикланадиган энергия манбаларидан фойдаланишда кенг қўлланилади. Чунки бундай энергия манбаларидан фойдаланишда асосий камчилик, бирламчи энергиянинг табиат томонидан ҳосил қилинишидир. Бу ерда бирламчи энергияни ҳосил қилишда ёки мавжуд энергияни бошқариш фақатгина табиат томонидан амалга оширилади. Ёқилғи энергетик ресурслардан электр энергияси олишни эса инсон омили орқали бошқарса бўлади. Шу сабабли қайта тикланадиган энергия манбаларидан фойдаланишда захиралаш қурилмаларидан фойдаланмаслик электр энергияси таъминоти ишончлигига салбий таъсир кўрсатади. Қайта тикланадиган энергия манбаларида захиралаш қурилмаларидан фойдаланиш, электр энергиясига талаб бўлмаган вақт оралиқларидаги энергия оқимларини захиралаш ва ушбу энергиядан энергия истеъмоли юқори бўлган вақт оралиқларида фойдаланиш имкониятини яратади. Сўнги вақтларда захиралаш қурилмаларидан фойдаланишнинг долзарблиги ушбу қурилмаларга бўлган эътиборни кучайтирди ва ушбу соҳада илмий изланишлар олиб бориш учун етарлича асос бўлмоқда.

Қайта тикланадиган энергия манбаларини марказлашган электр тармоғи билан ишлатишда энергия захиралаш қурилмаларидан фойдаланиш кўпгина камчиликларни бартараф этиши мумкин, яъни қайта тикланадиган энергия манбаларидан чиқадиган қувватни силлиқлаш, тармоқда электр энергияси бўлмаганда электр энергияси билан таъминлаш, шунингдек, паст юкланиш даврида захиралаш қурилмаларини тармоқ қувватини захиралаш орқали қувват балансини сақлаб туриш ва электр энергиясига талаб юқори бўлганда кўшимча қувват билан таъминлаш [1]. Аммо, электр таъминотида энергия захиралаш қурилмаларидан ҳаддан ташқари кўп фойдаланиш катта харажатларга олиб келиши ва бу энергия захиралаш тизимларидан электр энергияси етказиб бериш учун тижорат мақсадларида фойдаланишда ҳалақит бериши мумкин.

Электр энергияси асосий хусусияти шундан иборатки ушбу энергия тури ишлаб чиқарилиши билан истеъмом қилиниши керак [2].

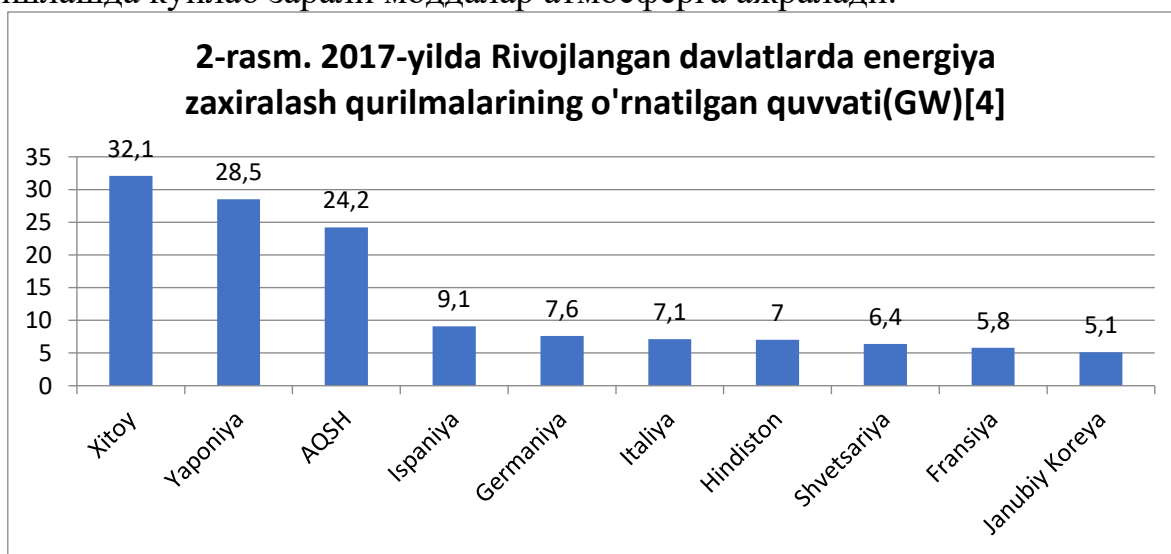
$$E(t) = \int_t p(r)dr = \int_t v(r)i(r)dr;(1)$$

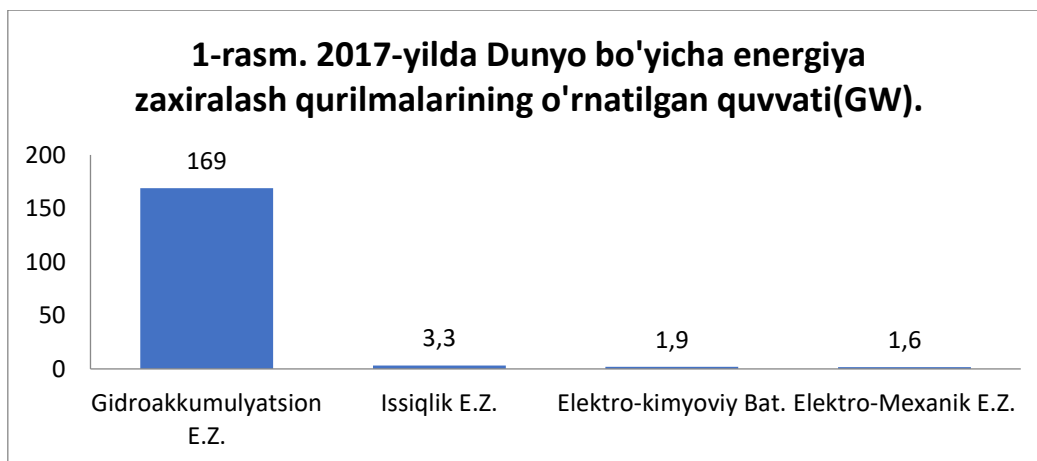
Электр токи бу – вақт бирлиги ичида зарядланган заррачаларнинг оқимидир:

$$i(t) = \frac{d}{dt}q_e(t);(2)$$

Демак электр энергияси фақатгина электр энергиясига талаб бўлган ҳолатдагина ишлаб чиқарилиши керак. Шу сабабли ушбу энергия манбасидан фойдаланишда кўпгина ноқулайликлар кузатилади. Масалан ҳосил бўлган вақтда истеъмолчи бўлмаслиги ёки аксинча истеъмолчи бўлмаган вақтда энергия бўлмасли мумкин. Бундан ташқари электр энергиясини бошқа тур энергия сифатида захираланган энергияни, ишлатиш учун қулай бўлган энергияга генерацияланиши деб қараш мумкин. Масалан, ИЕС ларда кўмир, газ ва нефтнинг захиралаган кимёвий энергиясини электр энергиясига айлантириш, Қуёш ва атом электр станцияларида атом энергиясидан электр энергияси ишлаб чиқариш, гидроэлектростанцияларда сувнинг потенциал ва кинетик энергиясидан электр энергияси ишлаб чиқариш ва ҳоказо. Шу сабабли электр энергиясини захиралашни ҳам фақатгина энергияни бошқа турига айлантириш орқали амалга ошириш мумкин. Мисол учун электр энергиясини иссиқлик энергиясига айлантириш ва иссиқлик энергиясини захиралаш, бундан ташқари электр энергиясини кимёвий энергия кўринишида, потенциал ва кинетик энергия ва ҳоказо энергиялар кўринишида захиралаш мумкин [3].

Тўртинчидан. Механик Э.З. қурилмалари бошқа Э.З. қурилмаларига нисбатан экологик тоза ҳисобланади. Чунки аккумулятор батареяларини ишлаб чиқариш учун ишлатиладиган материалларни қазиб олишда ва қайта ишлашда кўплаб зарали моддалар атмосферага ажралади.





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*Джалилов У.А.
ассистент
ДжизПИ
Сайлиева Ф.А.
учитель школы
Узбекистан, г.Джизак*

ОПТИМАЛЬНОЕ УПРАВЛЕНИЕ РЕЖИМАМИ РАБОТЫ СИСТЕМ ЭЛЕКТРОСНАБЖЕНИЯ ПРИ ВЫСОКО СКОРОСТНОМ ДВИЖЕНИИ

Аннотация. Наименьшая мощность СТЭ требуется при наиболее равномерном распределении поездов (по их числу и типу) во времени, содержащих в своем составе станций с ограниченным запасом первичных энергоресурсов.

Ключевые слова: распределение нагрузки, номинальная мощность нагрузки, баланс мощности, распределение нагрузки, форсированная мощность.

*Jalilov U.A.
assistant
JizPI
Sailieva F.A.
school teacher
Uzbekistan, Jizzakh*

OPTIMAL CONTROL OF OPERATING MODES OF POWER SUPPLY SYSTEMS AT HIGH SPEED TRAFFIC

Abstract. The lowest power of the STE is required with the most uniform distribution of trains (by their number and type) over time, containing stations with a limited supply of primary energy resources.

Keywords: Load distribution, rated load capacity, power balance, load distribution, forced power.

Минимизация потерь электроэнергии в тяговой сети является целевой задачей участия системы тягового электроснабжения (СТЭ) в формировании энергетической эффективности электрической тяги в целом [1]. Наименьшая мощность СТЭ требуется при наиболее равномерном распределении поездов (по их числу и типу) во времени. Повышение энергетической эффективности режимов работы СТЭ переменного тока с нерациональными потоками реактивной мощности и наличием транзита мощности из-за межсистемных перетоков требует применения

автоматического регулирования напряжения на тяговых подстанциях и ввода в работу рациональных мощностей компенсирующих устройств, [2]

Эффективность применения конденсаторных установок в электроэнергетике известна давно [3]. Они позволяют повысить провозную способность железных дорог при больших нагрузках за счет повышения напряжения в тяговой сети до нормируемых значений. С их помощью также нормализуется баланс по реактивной мощности в рассматриваемом узле электроснабжения для обеспечения приемлемого режима напряжения для потребителя, решаются вопросы снижения потерь мощности и в целом повышается качество электроэнергии.

Компенсация реактивной мощности направлена в основном на экономию (уменьшение потерь) при эксплуатации тяговых сетей и одновременно на улучшение качества напряжения. Для нахождения наилучшего решения необходимо сопоставлять стоимость установки компенсирующих устройств и дополнительной аппаратуры к ним (с учетом расходов на эксплуатацию) с экономией на стоимости потерь в тяговых сетях, а также с выигрышем, полученным за счет улучшения качества напряжения ЭПС и не тяговых потребителей. Эффективный вариант компенсации реактивной мощности тяговой нагрузки - распределенная система КУ в тяговой сети, когда КУ включены на постах секционирования и на тяговых подстанциях.

Для выбора номинальной мощности КУ следует выполнить расчет наименьшего действующего напряжения на токоприемнике ЭПС для заданных размеров движения по нормальной (проектной) схеме СТЭ с учетом сгущения поездов в интенсивный час. Расчеты во всех случаях следует выполнять с использованием программных комплексов с имитацией взаимосвязанных мгновенных схем движущихся нагрузок ЭПС [5].

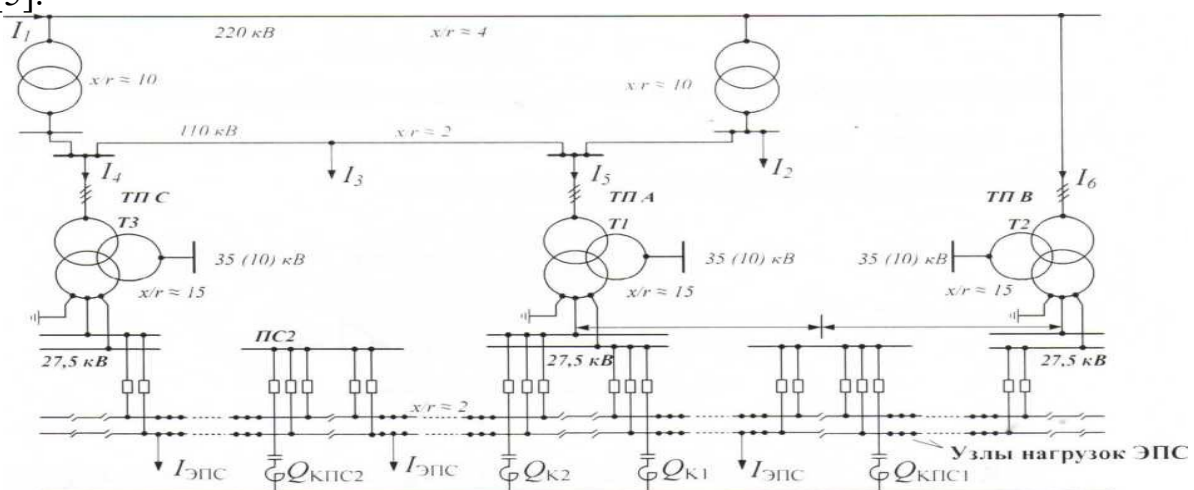


Рис. 1.1. Фрагмент внешнего электроснабжения тяговой сети с распределенной поперечно емкостной компенсацией.

Так для каждой из меж подстанционных зон рассматриваемого участка (рис. 1.1) при заданных размерах движения и нормальной схеме питания определяется фактическое наименьшее напряжение на токоприёмнике ЭПС

$$U_{\text{мин.ф.}} \dot{U}_{\text{мин.ф.}} = (\sum_{i=1}^n \dot{U} - \Delta \dot{U}_{\text{max}i}) / n,$$

где $\dot{U}_{\text{ши}i}$ - мгновенное значение напряжения на шинах тяговой подстанции; $\Delta \dot{U}_{\text{max}i}$ - мгновенное максимальное падение напряжения в векторе $\Delta \dot{U}_a$ падение напряжений от узлов нагрузок ЭПС до базисного узла; n - количество решенных мгновенных схем за время моделирования T .

$$\Delta \dot{U} = \dot{Y}^{-1} j 1.4$$

где $\dot{Y} = MZ_B^{-1} M_t$ - матрица узловых проводимостей.

Вначале принимаем вариант с размещением КУ на постах секционирования (на рис. 3.1.1. $Q_{\text{кпс}1}$ и $Q_{\text{кпс}2}$). Расчетная мощность КУ, необходимая для повышения напряжения до нормированного значения Q_k , определяется разностью наименьших значений нормированного и фактического действующего напряжения на токоприемнике ЭПС ($U_{\text{мин. норм}} - U_{\text{мин.ф.}}$) и входным индуктивным сопротивлением до КУ ($X_{\text{вх}}$) по формуле, $M_{\text{вар}}$:

$$Q_k = U_{\text{ном}}^2 (U_{\text{мин. норм}} - U_{\text{мин.ф.}}) / \{U_{\text{мин. норм}} * X_{\text{вх}}\} 1.5$$

где $U_{\text{ном}}$ - номинальное напряжение КУ ($U_{\text{ном}} = 27,5$ кВ); $X_{\text{вх}}$ - входное индуктивное сопротивление до КУ.

Входное индуктивное сопротивление до КУ поста, секционирования при двухстороннем питании контактной сети от смежных подстанций ТП А и ТП В (рис. 3) определяется по формуле, Ом:

$$X_{\text{вх}} = \frac{A * B}{A + B} 1.6$$

где $A = X_{\text{ТС}a} + 2X_{\text{ТР}a} + 2X_{\text{С}a}$, $B = X_{\text{ТС}b} + 2X_{\text{ТР}b} + 2X_{\text{С}b}$, $X_{\text{ТС}a}$ и $X_{\text{ТС}b}$ - индуктивные сопротивления тяговой сети соответственно от подстанций ТП А и ТП В до КУ, Ом; $X_{\text{ТС}a}$ и $X_{\text{ТС}b}$ - индуктивные сопротивления включённых в работу трансформаторов на подстанциях ТП А и ТП В, Ом;

$X_{\text{С}a}$ и $X_{\text{С}b}$ - индуктивные сопротивления системы внешнего электроснабжения соответственно до подстанций ТП А и ТП В, Ом.

Индуктивное сопротивление включенных в работу трансформаторов на подстанции ТП А (ТП В) определяется по формуле, Ом:

$$X_{\text{ТР}} = U_{\text{кз}} * U_{\text{ном}}^2 / 100 * n * S_{\text{ТР}} 1.7$$

где $U_{\text{кз}}$ - напряжение короткого замыкания трансформатора, %; $U_{\text{ном}}$ - номинальное напряжение трансформатора ($U_{\text{ном}} = 27,5$ кВ), $S_{\text{ТР}}$ - номинальная мощность трансформатора, МВ*А, n - количество включённых в работу трансформаторов.

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*Jalilov O`A.
Jizzax politexnika instituti assistenti*

ЎЗБЕКИСТОН РЕСПУБЛИКАСИДА ЭЛЕКТР ЭНЕРГЕТИКА ТИЗИМИНИНГ АУДИТИ СОҲАСИДА ҚАБУЛ ҚИЛИНГАН ҚОНУН ВА МЕЪЁРИЙ ҲУЖЖАТЛАР ТАҲЛИЛИ

Аннотация. Маълумки, республикада иқтисодиёт барқарор ўсишини таъминлашга ва аҳолининг фаровонлик даражасини оширишга, ёқилғи-энергетика ресурсларига бўлган талаб – эҳтиёжни узлуксиз қаноатлантиришга қаратилган нефть – газ, электр энергетика, кўмир, кимё, қурилиш индустриясини ривожлантиришнинг узоқ муддатли стратегияси.

Калит сўзлар: энергия тежаш, энергия самарадорлиги, энергетик тежамкорлик, ишончли фаолият, энергия сарфи, қайта тикланувчи энергия манбалари.

*Jalilov O`A.
assistant
Jizzakh Polytechnic Institute*

ANALYSIS OF THE LAW AND REGULATORY DOCUMENTS ADOPTED IN THE FIELD OF ELECTRICAL ENERGY SYSTEM AUDIT IN THE REPUBLIC OF UZBEKISTAN

Abstract. It is known that in the republic, economic recovery, housing and population provision abound with long-term strategic prospects, and in Kazakhstan – energy resources - long-term needs, satisfaction of needs in the nodes of the oil and gas, electric power, chemical, chemical industries.

Keywords: energy saving, energy efficiency, energy saving, reliable activity, energy consumption, renewable energy sources.

Сўнги йилларда мамлакатимизда, аввало, иқтисодиётнинг барча тармоқларини ривожлантиришни жадаллаштириш, инвестицион жозибadorлик ва ишбилармонлик фаоллигини ошириш, ишлаб чиқариш ва хизмат кўрсатиш соҳасини кенгайтириш борасида кенг кўламли ислохотлар амалга ошириш ҳамда Ўзбекистон республикасида энергетикани ривожлантириш ва ундан оқилона фойдаланиш бўйича “Энергиядан оқилона фойдаланиш тўғрисида”, “Электр энергетика тармоғини янада ривожлантириш ва ислох қилиш стратегияси тўғрисида”, “Электр энергетикаси тўғрисида”, “Электр ва иссиқлик энергиясидан фойдаланиш қоидаларини тасдиқлаш тўғрисида”, “Қайта тикланувчи энергия

манбаларидан фойдаланиш тўғрисида” ва бир нечта қонунлар қабул қилинди.

Юқорида санаб ўтилган қонунлар ичида 1997 йил 25 апрелда қабул қилинган “Энергиядан оқилона фойдаланиш тўғрисида” ги қонун энергия ҳосил қиладиган ва энергия сарфлайдиган асбоб-ускуналар ҳамда маҳсулотга қонунчиликда назарда тутилган тартибда энергия жиҳатидан самарадорлик кўрсаткичларидан фойдаланиш ҳақидаги қонунлардан бири ҳисобланади. Ушбу қонуннинг мақсади миллий энергетика ресурслари сақланишини, энергиядан ва ишлаб чиқариш имкониятларидан самарали фойдаланишни таъминлайдиган умумий ҳуқуқий асосларни шакллантиришдан иборатдир. Албатта, Ўзбекистон Республикасининг 1997 йил 25 апрелда қабул қилинган «Энергиядан оқилона фойдаланиш тўғрисида»ги 412-І-сонли Қонунига киритилган ўзгартиришлар Қонунчилик палатаси томонидан 2020 йил 1 майда қабул қилинган бўлиб, Сенат томонидан 2020 йил 19 июнда маъқулланган. Ўзбекистон Республикасининг Президенти Ш. Мирзиёев 2020 йил 14 июль санасида ушбу ўзгартиш ва қўшимчаларни ЎРҚ-628-сон билан имзолади, Қонун расман эълон қилинди ва эълон қилинган кундан эътиборан кучга кирди. Хулоса ўрнида шуни алоҳида таъкидлаш жоизки, Ўзбекистон Республикаси Қонунига ўзгартиш ва қўшимчалар киритилганда: «энергиядан оқилона фойдаланиш», «энергияни тежаш ва энергия жиҳатидан самарадорликни ошириш», «давлат томонидан қўллаб-қувватлашни», «энергия жиҳатидан самарадор», «энергия тежаладиган дастурлар ва лойиҳаларни ишлаб чиқиш», «энергия жиҳатидан тежамкор техника ҳамда маҳсулот» «қайта тикланувчи энергия манбалари» каби муҳим жумлалар учрайдики, буларнинг барчаси Қонун энергетика соҳасининг ривожини, истеъмолчиларнинг ҳақ-ҳуқуқлари, Ўзбекистоннинг табиий бойликларидан оқилона фойдаланиш — энергия тежамкорлигини ва самарадорлигини нуктаи назардан бирмунча такомиллаштирилган.

Ушбу мақсадда Энергетика вазирлигини томонидан «Энергияни тежаш ва энергия самарадорлигини ошириш тўғрисидаги» қонун лойиҳаси ишлаб чиқилди ва норматив-ҳуқуқий ҳужжатлар лойиҳаларининг муҳокамаси порталида эълон қилинди. Лойиҳа 7 боб ва 24 моддадан иборат. У энергия тежаш ва энергия самарадорлигини объект ва субъектларига тавсиф берувчи, асосий атама ва тушунчаларни белгиловчи ҳамда энергетика нуктаи назардан муносабатларни расмийлаштирувчи янги бўлим ва моддаларни ўз ичига олган. Бундай қонун лойиҳада келтирилган моддалар албатта энергияни тежаш ва самарадорлигини ошириш учун мақсад қилинган.

Ўзбекистон Республикаси Олий Мажлиси томонидан 2009 йил 30 сентябрда қабул қилинган “Электр энергетикаси тўғрисида”ги қонуннинг қабул қилиниши электр энергетикаси соҳасидаги муносабатларни тартибга солиш, Ўзбекистон Республикасининг электр энергетика хавфсизлигини таъминлаш, электр энергиясини ҳосил қилиш, узатиш ва сотиш бўйича

бошқарув ҳамда хўжалик алоқалари тизимига бозор принциплари ва механизмларини жорий этиш, электр энергетикасининг мутаносиб ривожланишини таъминлаш, электр энергиясидан ва ёқилғи-энергетика ресурсларидан оқилона фойдаланишга имкониятини беради.

Ўзбекистон Республикаси Олий Мажлиси томонидан 2019 йил 27 мартда қабул қилинган “Ўзбекистон Республикасида электр энергетика тармоғини янада ривожлантириш ва ислоҳ қилиш стратегияси тўғрисида” қонун Электр энергетика тармоғининг ишончли фаолият юритишини таъминламасдан туриб иқтисодиёт тармоқлари ва мамлакат ҳудудларининг саноат салоҳиятини ошириш, тадбиркорлик фаолиятини ривожлантиришни рағбатлантириш, аҳоли фаровонлигини юксалтириш ва ҳаёт сифатини яхшилаш масалаларига бағишланган. Ушбу қонун замонавий шароитларда электр энергетика тармоғида рақобат муҳитини ривожлантириш ва инвестицияларни жалб қилиш электр энергиясини ишлаб чиқариш ва етказиб бериш соҳасидаги фаолиятнинг институционал ва ташкилий-ҳуқуқий асосларини тубдан такомиллаштириш, электр энергетика тармоғини ислоҳ қилиш бўйича вазифаларнинг амалий ижросини таъминлаш, шунингдек, 2017 — 2021 йилларда Ўзбекистон Республикасини ривожлантиришнинг бешта устувор йўналиши бўйича Ҳаракатлар стратегияси ва Ўзбекистон Республикаси Маъмурий ислохотлар концепциясида белгиланган вазифаларни бажариш мақсадларини белгилайди.

Маълумки, республикада иқтисодиёт барқарор ўсишини таъминлашга ва аҳолининг фаровонлик даражасини оширишга, ёқилғи-энергетика ресурсларига бўлган талаб – эҳтиёжни узлуксиз қаноатлантиришга қаратилган нефть – газ, электр энергетика, кўмир, кимё, қурилиш индустриясини ривожлантиришнинг узоқ муддатли стратегияси амалга оширилмоқда. Шу билан бирга, ёқилғи – энергетика тармоғининг мавжуд қувватлари энергия ресурсларига ортиб бораётган талаб-эҳтиёжни тўлиқ даражада таъминламаяпти, мамлакатимиз иқтисодиётининг энергия сарфи ҳажми ривожланган мамлакатларнинг ўртача кўрсаткичидан анча юқоридир. Ҳозирги вақтда асосан гидроэлектростанциялар ишлаб чиқараётган қайта тикланувчи энергия манбалари ҳиссасига мамлакатда ишлаб чиқарилаётган электр энергияси умумий ҳажмининг атиги ўн фоизи тўғри келмоқда. Ниҳоятда катта салоҳият мавжуд бўлишига қарамасдан, қуёш ва шамол сингари қайта тикланувчи энергия манбаларининг имкониятларидан тўлиқ даражада фойдаланилмаяпти. Шу муносабат билан, иқтисодиёт тармоқлари ва ижтимоий соҳанинг энергия самарадорлигини ошириш, энергия тежовчи технологиялар ва қайта тикланувчи энергия манбаларини кенг жорий этиш давлат сиёсатининг ҳозирги босқичдаги долзарб йўналишларидан бири бўлиб қолиши лозим. Илғор хорижий тажрибани инобатга олиб, мавжуд ресурсларни ва ишга солинмаган салоҳиятни жалб этиш орқали энергия самарадорлигини ошириш, энергия

тежовчи технологиялар ва қайта тикланувчи энергия манбаларини кенг жорий этиш, иқтисодиёт тармоқлари ва ижтимоий соҳанинг энергия сарфи ҳажмини кескин камайтириш борасидаги ишларни комплекс ташкил этиш, шунингдек, ёқилғи-энергетика ресурсларидан оқилона ва самарали фойдаланишни таъминлаш мақсадида Ўзбекистон Республикаси Олий Мажлиси томонидан 2019 йил 3 майда қабул қилинган асосий қонунлардан бири "Қайта тикланувчи энергия манбаларидан фойдаланиш тўғрисида" ги қонун алоҳида ўрин тутди.

Адабиётлар рўйхати:

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Жалилов Ў.А.
ЖизПи асс ўқитувчиси

ТЕХНИК ВАҚОЛАТЛАРНИ РИВОЖЛАНТИРИШ ВА АХБОРОТЛАР АСОСИДА ТАЪЛИМ ТЕХНОЛОГИЯЛАРИ

Аннотация. Бўлажак мутахассис муҳандиснинг нормал касбий фаолиятини таъминлаш зарурати жамиятда юқори самарали ахборот технологияларини, университетда замонавий педагогик ва психологик фаннинг илгор ютуқларини жорий этиш асосида ўқув жараёнининг юқори технологик қобилиятини сақлаб қолиш вазифасини такомиллаштириш.

Калит сўзлар: Ахборот технологиялари, интеллектуал, техник компетенция, технологик таълим.

Jalilov O'.A.
assistant teacher
JizPI

TECHNICAL CAPACITY DEVELOPMENT AND INFORMATION BASED LEARNING TECHNOLOGIES

Annotation. The need to ensure the normal professional activity of a future specialist engineer to improve the task of maintaining the high technological capabilities of the educational process on the basis of the introduction of highly effective information technologies in society, advanced achievements of modern pedagogical and Psychological Science at the University.

Keywords: Information technology, intellectual, technical competence, technological training.

Бугунги кунда рўй бераётган ижтимоий-иқтисодий, ижтимоий-сиёсий жараёнлар, таълимда этник-маданий анъаналарнинг ривожланиши янги аср бошидаги таълимнинг моҳияти ва мазмунини белгилайдиган асосий устуворликларни аниқлашни талаб қилади.

Алоҳида муаммоларнинг устуворлиги яққол кўриниб турибди, биз янги минг йилликнинг янги асридаги одамни келажакда университетда ўқитишнинг ахборот технологиялари асосида қабул қилинган ўз - ўзини ривожлантириш ва ўз-ўзини тарбиялаш анъаналарига мувофиқ олиб бориши мумкин бўлган баъзи йўналишларни намоиш этамиз. Талабаларнинг асосий техник компетенцияларини ривожлантириш ва ўз-ўзини ривожлантириш-келажакдаги муҳандислар.

Кўриниб турибдики, кўзланган мақсадни ҳал қилиш учун, биринчи навбатда, келажакдаги мутахассиснинг касбий тайёргарликда янги мазмун бўйича ривожланишини фаоллаштириш керак, аммо гуманистик фикрлаш

ва дунёқарашнинг маҳаллий анъаналарига асосланган. У умумий ва касбий таълимнинг янгиланган мазмунига, электрон таълим воситалари асосида талабаларнинг техник компетенцияларини ўз-ўзини ривожлантиришга таяниши керак. Бу талабаларга келажакдаги мутахассислар сифатида фан, маданият, иқтисодиёт ва технология тушунчалари ва қоидаларини ўзлаштиришга имкон беради, уларни чексиз янгиланадиган ҳаётда янги билимлар билан жиҳозлайди.

Бўлажак мутахассис муҳандиснинг нормал касбий фаолиятини таъминлаш зарурати жамиятда юқори самарали ахборот технологияларини, университетда замонавий педагогик ва психологик фаннинг илғор ютуқларини жорий этиш асосида ўқув жараёнининг юқори технологик қобилиятини сақлаб қолиш вазифасини кўяди. Аслида, бугунги кунда кўпинча педагогика соҳасидаги илмий ишланмалар ва тадқиқот натижаларини амалиётга жорий этиш ўртасида бўшлиқ пайдо бўлади, кўплаб самарали ғоялар ва уларни амалиётга жорий этиш усуллари талаб қилинмайди.

Кейин техник ваколатлар қуйидагича ифодаланиши мумкин.

Умумий билим:

-гуманитар ва ижтимоий-иқтисодий фанлар соҳасидаги асосий назариялар;

- инсоннинг инсонга, жамиятга, атроф-муҳитга муносабатини тартибга солувчи ахлоқий ва ҳуқуқий нормалар;

- тирик ва жонсиз табиатда содир бўладиган жараёнлар ва ҳодисалар;

- фикрлаш маданиятининг умумий қонунлари;

- келажакдаги касбининг моҳияти ва ижтимоий аҳамияти, фаолиятнинг маълум бир соҳасини белгиладиган фанларнинг асосий муаммолари, уларнинг яхлит билим тизимидаги ўзаро боғлиқлиги;

- соғлом турмуш тарзи ҳақида;

- бошқариш усуллари;

- педагогик фаолият асослари;

- технологик фаолият соҳасига тааллуқли қарорлар, фармойишлар, буйруқлар, услубий ва норматив материаллар;

- техника фанлари, техника ва технологияларни ривожлантиришнинг асосий илмий-техник муаммолари ва истиқболлари;

- технологик объектлар, муҳандислик тизимлари, материаллар, маҳсулотлар ва иншоотлар, ускуналар ва технологик линияларни лойиҳалаш, яратиш ва улардан фойдаланиш тизимлари ва усуллари;

- экспериментал ва назарий тадқиқотларни ўтказиш усуллари;

- тадқиқот ва ишланмалар бўйича махсус илмий ва патент адабиёти;

- замонавий офис ускуналари, компьютер технологиялари, алоқа ва алоқа воситалари;

- квант физикаси: корпускуляр-тўлқинли дуализм, принтсип

ноаниқликлар, квант ҳолатлари, суперпозиция принтсипи, квант ҳаракат тенгламалари, физик катталик операторлари, атомлар ва молекулаларнинг энергия спектри, кимёвий боғланиш табиати;

- статик физика ва термодинамика: термодинамиканинг урта принтсипи, термодинамик ҳолат функциялари, фазавий мувозанат ва фазавий трансформациялар, мувозанатсиз термодинамика элементлари, классик ва квант статистикаси, кинематик ҳодисалар, зарядланган зарралар тизимлари, конденсацияланган ҳолат;

- жисмоний семинар.

Махсус фанлар бўйича билим:

- мутахассислик асослари тўғрисида;

- муайян ишлаб чиқаришнинг замонавий усуллари ва ўзига хос хусусиятлари тўғрисида;

- технологик материалларнинг таснифи ва хусусиятлари ва имкониятлари тўғрисида

уларнинг замонавий ишлаб чиқаришда қўлланилиши;

- материаллар ишлаб чиқариш технологияси тўғрисида;

- саноат объектларининг ўзига хос хусусиятлари тўғрисида;

- битта объектнинг тузилиши ҳақида;

- технологик жараённинг назарий тушунчалари ва методологияси ва унинг баҳолаш тоифалари тўғрисида.

- дизайн ва ишлашнинг турли босқичларида технологик материалларнинг роли тўғрисида.

Кўникмалар:

- касбий ва ижтимоий фаолиятнинг ҳар хил турларида гуманитар ва ижтимоий-иқтисодий фанлар усулларида фойдаланиш;

- ижтимоий лойиҳаларни ишлаб чиқишда инсоннинг инсонга, жамиятга, атроф-муҳитга муносабатини тартибга солувчи ахлоқий ва ҳуқуқий нормаларни ҳисобга олиш;

- ишингизни илмий асосда ташкил қилинг,

- касбий функцияларни амалга ошириш билан боғлиқ вазифаларни белгилаш ва шакллантириш, уларни ҳал қилиш учун у ўрганган фанларнинг усулларида фойдаланиш қобилияти;

- ёзма ва оғзаки нутқда унинг натижаларини тўғри (мантикий) тартибга солиш; - ҳамкасблар билан ҳамкорлик қилиш ва жамоада ишлаш,

- табиатни билишнинг замонавий илмий усуллари қўллаш ва уларга табиий илмий таркибга эга бўлган ва касбий функцияларни бажаришда юзага келадиган муаммоларни ҳал қилиш учун зарур бўлган даражада эғалик қилиш;

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Жалилова Ч.З.
Бухоро давлат педагогика институти
Табиий фанлар кафедраси ўқитувчиси

РОМИТАН ТУМАНИ ҚЎРҒОН МАҲАЛЛАСИДА ТУРИЗМНИ РИВОЖЛАНТИРИШНИНГ АЙРИМ ЖИҲАТЛАРИ

Аннотация. Ушбу мақолада кичик маъмурий бирликлар, хусусан, туманлар ва уларнинг маҳаллаларида туризмни ривожлантириш масалалари ёритилган. Мақолада Ромитан туманидаги Қўрғон маҳалласининг туристик имкониятлари ўрганилган. Ишда Қўрғон маҳалласида туризм борасидаги амалга оширилган ишлар хусусида фикрлар баён этилган.

Калит сўзлар: туризм, туризм имкониятлари, географик ўрин, Ромитан тумани, Қўрғон маҳалласи, “Етти Пир”, туризм маҳалласи.

Jalilova Ch.Z.
teacher
Department of Natural Sciences
Bukhara State Pedagogical Institute

SOME ASPECTS OF TOURISM DEVELOPMENT IN KORGON NEIGHBORHOOD OF ROMITAN DISTRICT

Abstract. This article discusses issues of tourism development in small administrative units, in particular, districts and their mahallas. The article discusses the tourism opportunities of the Kurgan mahalla of the Ramitan region. The work expresses opinions on the activities carried out in the field of tourism in the Kurgan mahalla.

Key words: Tourism, tourist opportunities, geographical location, Ramitan district, Kurgan mahalla, "Etti Pir", tourist mahalla.

Ўзбекистон Республикаси вилоятлари жуда катта туристик имкониятларга эга. Булар орасида Бухоро вилояти ўзининг ноёб архитектура ёдгорликлари, тарихий обидалари, диний зиёратгоҳлар ва бошқа диққатга сазовор жойларни кўплиги билан алоҳида ажралиб туради.

Бизга маълумки, Бухоро вилояти шаҳар ва туманлари орасида туризм асосан вилоят – Бухоро шаҳрида ривожланган. Аммо, вилоятнинг туманларида ҳам туризмни янада ривожлантиришнинг истиқболлари мавжуд.

Бухоро вилояти шаҳар ва туманлари орасида туризм нисбатан яхши ривожланган туманлардан бири Ромитан туманидир. Туман ҳудудида 10 га яқин диққатга сазовор жойлар бор. Бундай объектлар сирасига Хўжа

Заъфарон, Хўжа Уббон, Хўжа Ниёз Хоразмий, Ҳақим Мулло Мир архитектура ёдгорликлари, Чорикулбой Пирнафас ўғли номидаги кўприк, Қўрғони Ромитан археология ёдгорлиги, “Bukhara Desert Oasis & Spa” экокластери ва ҳ.к. Бундан ташқари, Бухоронинг 7 пирларидан иккиталарининг, яъни, тўртинчи пир – Хўжа Али Ромитаний (Хўжа Азизон), бешинчи пир – Муҳаммад Бобои Самосий зиёратгоҳилари ҳам шу туманда жойлашган. Қолаверса, туман табиати ҳам ўзига хос. Унда жаннатмакон воҳа ҳудуди билан бирга, чўл ҳудудлари ҳам мавжуд. Мазкур омиллар сабаб Ромитан туманида нафақат ички, балки ташқи туризмни ҳам ривожлантиришнинг катта имкониятлари бор.

Ромитан туманидаги туризм объектларидан бири Қўрғони Ромитан археология мероси объектини ЮНЕСКОнинг Умумжаҳон мероси объектлари рўйхатига киритиш бўйича номзодлик ҳужжатлари тайёрланмоқда. Бу эса туманга ташқи туризмни янада ривожлантиришга ёрдам беради.

Шаҳар ва туманларнинг туристик имкониятлардан самарали фойдаланиш мақсадида мамлакатимиз Президенти ва ҳукумати томонидан бир нечта қарор ва фармонлар чиқарилди. Шулардан бири Ўзбекистон Республикаси Президентининг 2019 йил 13 августдаги ПФ-5781-сонли “Ўзбекистон Республикасида туризм соҳасини янада ривожлантириш чора-тадбирлари тўғрисида” Фармони дир. Ушбу фармонда белгиланган талаблардан келиб чиқиб, бутун республика ҳудудлари доирасида туризмни янада ривожлантириш ишлари белгилаб берилди. ПФ-5781-сонли фармонда белгиланган муҳим масалалардан бири туман ва шаҳарларнинг туризм салоҳияти юқори бўлган ҳудудларида “Туризм маҳалласи”, “Туризм қишлоғи” ва “Туризм овули”ни ташкил этилиши дир.

Бундан ташқари, Вазирлар Маҳкамасининг «Ўзбекистон Республикасида туризм соҳасини тиклаш ва ривожлантириш учун қулай шарт-шароитларни яратиш чора-тадбирлари тўғрисида»ги 2020 йил 10 июлдаги 433-сонли қарори билан тасдиқланган «Фуқаролар йиғинларига «Туризм маҳалласи» «Туризм қишлоғи» ва «Туризм овули» мақомини бериш тартиби тўғрисидаги Низом»нинг ижросини таъминлаш мақсадида юқоридаги мақомларни олиш тартиби жорий қилинди. Унга кўра:

- фуқаролар йиғини ҳудудида хорижий ва маҳаллий туристларни қабул қилиш учун камида 20 та оилавий меҳмон уйлариининг мавжудлиги;
- фуқаролар йиғини ҳудудида туристларга камида 5 хил сифатли туристик хизматларни тақдим этиш (турар жой ва (ёки) овқатланиш хизматларидан ташқари);
- фуқаролар йиғини ҳудудида туризмнинг қуйидаги турларидан бирини ташкиллаштириш:
 1. экологик (геотуризм);
 2. агротуризм (қишлоқ);
 3. этнографик;

4. маданий ва тарихий;

- фуқаролар йиғини ҳудудида маҳаллий ишлаб чиқарилаётган эсдалик совғалари маҳсулотларини (камида битта савдо нуктаси) сотиш шохобчаларини ташкил этиш каби яна 10 дан ортиқ шартларни 148 бажариши лозим.

Мазкур фармон ва қарорлардан келиб чиқиб, Бухоро вилоятининг ҳар бир тумани ҳудудида туристик имконияти мавжуд ҳудудлар танлаб олиниб, улар асосида вилоятда 10 дан ортиқ “Туризм маҳалласи” ва “Туризм қишлоғи” шакллантирилмоқда. Ана шулардан бири Ромитан туманидаги Қўрғон туризм маҳалласидир. Қўрғон туризм маҳалласи Ромитаннинг бой тарихга эга масканларидан биридир. Унда тарихнинг турли даврларига тегишли бой архитектура объектлари ва археология ёдгорликлари сақланиб қолинган.

Қўрғон маҳалласи Ромитан туманининг ғарбий қисмида (Ромитан бўлагининг 149) жойлашган бўлиб, Бухоро – Газли йўли яқинида ўрнашган. Ҳудуд туман маркази (Ромитан шаҳри) ва вилоят маркази (Бухоро шаҳри) билан транспорт қатновига эга. Бу эса ҳудуднинг географик ўрнининг қулайлигини кўрсатади.

Дарҳақиқат, Қўрғон маҳалласида Ромитан туманининг бошқа ҳудудларига нисбатан туризм бирмунча яхши ривожланган. Бунга энг аввало, Қўрғон маҳалласи ҳудудида бир нечта туристик объектлар ва имкониятларнинг мавжудлиги сабаб бўлган. Булар:

- Бухоронинг 7 пирларидан, тўртинчиси – Хўжа Али Ромитаний (Хўжа Азизон) зиёратгоҳи;
- Бухоронинг 7 пирларидан, бешинчиси – Муҳаммад Бобои Самосий зиёратгоҳи;
- Қадимий Қўрғони Ромитан археологик ёдгорлиги;
- Аҳолининг деҳқончилик маданияти ривожланганлиги (анор ва анжир етиштириш маданияти) ва ҳ.к.

Бугунги кунда мазкур маҳаллани «Фуқаролар йиғинларига «Туризм маҳалласи» «Туризм қишлоғи» ва «Туризм овули» мақомини бериш тартиби тўғрисидаги Низом» ривожланиб келмоқда. Ҳозирги кунда маҳаллада анча ибратли ишлар амалга оширилмоқда. Хусусан, йўллар таъмирланиб, атрофлари ободонлаштирилмоқда. 10 дан ортиқ янги оилавий меҳмон уйлари, савдо дўконлари ва умумий овқатланиш муассасалари барпо этилмоқда.

Шунингдек, яқин келажакда “Хўжа Али Ромитаний” зиёратгоҳи олдида “Анжир ва узум” фестивалини ташкил этиш, “Қўрғон” тепалигини

148 Багафсил куйидаги электрон адресдан маълумот олиш мумкин:
<https://uzbektourism.uz/cyrl/newnews/view?id=1440>

149 Маълумки, Ромитан тумани Ўзбекистон Республикаси туманлари орасида географик жойлашувига кўра алоҳида ажралиб турди. Туман ҳудуди бир биридан ажралган 3 та қисм – Ромитан, Газли ва Қизилравот ҳудудларидан ташкил топган.

ЮНЕСКОнинг Бутунжаҳон маданий мероси рўйхатига киритиб, уни олдида қадимий “Қўрғон” тепалиги музейини ташкил этиш белгиланган.

Хулоса қилиб айтганда, бундай амалий тадбирлар Ромитан туманида, хусусан унинг Қўрғон маҳалласида туризмни янада ривожлантириб, уни вилоятимизнинг асосий туризм маҳалласига айлантириши шубҳасиз.

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**Жонузоков Н.
ассистент
Карши муҳандислик иқтисодиёт институти
Ўзбекистон**

РАҚАМЛИ ИҚТИСОДИЁТ ШАРОИТИДА ТАДБИРКОРЛИКНИНГ ИЖТИМОЙ ХУСУСИЯТЛАРИ

Аннотация. Ушбу мақолада кичик бизнеснинг инновацион зояларни ишлаб чиқишдаги аҳамияти ва янгилаиб келаётган эҳтиёжларнинг мослашиш йўналишлари буйича таклифлар келтирилган

Калит сўзлар: Тадбиркорлик, кичик бизнес, инновацион иқтисодиёт, коммунтант, фирмалар.

**Nurbek J.
assistant
Karshi Engineering Economics Institute
Uzbekistan**

SOCIAL CHARACTERISTICS OF ENTREPRENEURSHIP IN THE DIGITAL ECONOMY

Annotation. In the article of prediction and development of innovative business and trends in innovation and process adaptation to the process.

Key words: Entrepreneurship, small business, innovative economics, communities, firms.

Ривожланган давлатларда кичик бизнесни ҳар томонлама қўллаб-қувватлаш сиёсати изчил равишда ўтказилади. Бунинг сабаби, кичик бизнеснинг ривожланишида икки жиҳатининг мавжудлигидир. Биринчидан, кичик бизнеснинг бозор иқтисодиётида бажарадиган иқтисодий ва ижтимоий вазифалари билан боғлиқ бўлиб, бу вазифалар унинг аҳамиятини акс эттиради. Иккинчи жиҳати эса кичик бизнес субъекларига хос бўлган камчиликлар ва муайян давлатда шу камчилликлар туфайли уни ривожланиши суст бораётганлиги билан боғлиқ. Кичик бизнеснинг бу икки томонини очиб бериш мамлакатимизда кичик бизнесни қўллаб-қувватлаш тизимини шакллантириш ва ривожлантириш заруриятини тақозо қилади.

Кичик бизнеснинг иқтисодиётдаги аҳамиятини у бажарадиган иқтисодий ва ижтимоий вазифалар тўлиғича кўрсатиб беради. Ушбу вазифаларни икки гуруҳга ажратиш мумкин. Биринчи гуруҳ- умумий вазифалар бўлиб, улар тадбиркорлик субъектининг очикдан-очик эълон қилинган инновацион мақсадларини акс эттирадиган вазифалардир.

Иккинчи гуруҳ - хусусий вазифалардир. Улар вақт ўтиши билан ўзини намоён этиб, инновацион фаолият қатнашчиларининг эълон қилинган мақсадларидан озми-кўпми фарқ қиладилар.

А.Смитнинг таъкидлаши бўйича: “Биз овқатланаётган пайтда қассоб, ошпаз ёки нонвойнинг саҳийлигига ишонмаймиз, биз улар хусусий манфаатларини амалга оширишга ҳаракат қилишларига ишонамиз, улар ўз манфаатларини орқасидан қувиб ва “кўринмас қўл” назорати остида ўзларнинг ҳаёлларига келмаган натижаларга эришадилар”[1].

Бу шуни англатадики, тадбиркор нафақат бойишга қаратилган индивидуал вазифаларни, балки яширин табиатга эга бўлган, ижтимоий характердаги функцияларни ҳам бажаради. Шунингдек, рақобатда узиб кетиш учун мақсадга инновацион ёндашади.

Бу эса бизга тадбиркорлик фаолиятининг иқтисодий вазифалар таркибидаги индивидуал вазифалар билан бирга, ижтимоий табиатга эга бўлган вазифаларни ажратишга имкон беради. Кичик бизнесни иқтисодий эркинликнинг омили сифатидаги асосий вазифаси биринчи ўринга қўйиш лозим. Кичик бизнес иқтисодий соҳада демократик тамойилларнинг кенг ёйилишини тامينлайди. Бир томондан, кичик бизнеснинг ривожланиши инсонга ёлланма ишчи ёки мустақил тадбиркор бўлишни танлаш имкониятини беради. Иккинчи томондан, кичик бизнес субъектининг фаолияти йирик корпорациялар фаолиятига нисбатан кўпроқ эркин бозор қонуниятларига бўйсинади. Миллий иқтисодиётни эркинлаштиришда кичик бизнеснинг ушбу вазифаси муҳим аҳамиятга эгадир. Чунки республикамизнинг асосини ташкил этувчи йирик корхоналарнинг давлатга боғлиқлик даражаси юқори бўлганлиги сабабли уларни бозорнинг эркин субъектлари сифатида кўриш қийин. Кичик бизнеснинг иккинчи вазифаси сифатида унинг яширин, интегратив (иқтисодиётни битта бутунликка боғловчи) вазифасини кўрсатиш лозим [2]. Бу вазифани бажарувчи фирмаларни коммутантлар деб аталиб, яратилган инновацион маҳсулотини оммалаштиришга хизмат қилади.

Бозор иқтисодиёти шароитида тўловга қобилиятли талабнинг мавжудлиги автоматик равишда таклифни пайдо қилиши керак. Аммо ҳозирги даврда самарали ишлаб чиқариш унинг танловчанлиги билан белгиланади. Бу эса иқтисодий нуқтаи назардан ҳамма ҳолатларда ҳам мақсадга мувофиқ бўлмайди.

Йирик корхона битта маҳсулотни катта ҳажмда ишлаб чиқарганида юқори самарага эришади ва фойдали бўлмаган товарларни ишлаб чиқаришга қўл урмайди.

Масалан, автомобиллар кўп ҳажмда ишлаб чиқариладиган товарлар бўлиб ҳисобланади. Лекин ўта йирик фирмаларга автомобиль ёқилғисини қўйиш шаҳобчаларини очиш мақсадга мувофиқ эмас, чунки трансакцион харажатлар кўпайиб кетиб, кунлик фойда етарли бўлмайди.

Фақат кичик коммутант фирмалар ҳар қандай имкониятдан фойдаланишга тайёрлар, бошқа компаниялар эса бу борада жуда танловчандирлар. Ўрта корхоналар кичик ҳажмдаги маҳсулот ишлаб чиқариш билан тавсифланади. Лекин улар махсус ва узоқ муддатли эҳтиёж ташкил топган секторларда ишлаб чиқаришни йўлга қуядилар. Ўрта фирмалар тор соҳада ахборот тўплаб, фаолият юргизишлари зарур.

Бу зиддият ижтимоий эҳтиёжларни доимий излаш билан шуғулланадиган ва бозор талабларига мослаша оладиган коммутант фирмалар орқали ечилади. Шунинг учун ҳам бу фирмалар ўз фаолиятида режалаштиришнинг йўқлиги билан ажралиб туради - улар жуда ихчам ва ҳар қандай ўзгаришларга тайёр бўлиши керак.

Иқтисодиёт учун кичик фирмалар фаолиятининг катта аҳамиятга эга эканлиги уларнинг эгилувчанлиги билан боғлиқ. Кичик бизнеснинг ривожланиш даражаси ҳақида миллий иқтисодиётнинг тез-тез ўзгариб турадиган бозор ҳолатига мослашиш қобилияти орқали хулоса чиқариш мумкин[3].

Кичик бизнеснинг муҳим яширин вазифаларидан бири бозор иқтисодиётида рақобат муҳитини шакллантириш вазифаси бўлиб ҳисобланади. Албатта, кичик фирмаларнинг йирик корпорациялар билан тўқнаш келиши кўп ҳолларда уларнинг мағлубияти билан тугайди. Лекин бутун кичик бизнес сектори ва йирик капитал билан ўзаро муносабатларда кичик фирмалар асосий куч сифатида хизмат қилмоқда.

Етакчи олимлар ва халқаро форум ва ташкилотлар экспертлари, ўсаётган ишсизликни бартараф этишнинг ягона усули-янги корхоналар ва иш жойларини барпо этиш деган хулосага келишган. Шунини алоҳида таъкидлаб ўтиш керакки, кичик бизнес аҳолининг ижтимоий заиф қатламларининг (аёллар, инвалидлар, қочоқлар ва бошқалар) меҳнатидан фойдаланади, улар йирик корхоналарда иш топа олмайдилар. Бундан ташқари кичик фирмалар амалий ўқитиш, ёш кадрларни тайёрлашнинг ўзига хос “Полигони” ҳисобланади. Шу билан бирга янгилик яратувчи кадрларни етиштириб беради.

Жаҳон мамлакатларида аҳолининг катта қисми кичик бизнес соҳасида фаолият кўрсатади. Жумладан, Хитойда 80%, Японияда 48%, АҚШда 50% аҳоли, Ўзбекистонда эса 78 фоиз аҳоли кичик тадбиркорлик соҳасида банд. Жаҳон мамлакатларида кичик тадбиркорликнинг иқтисодиётдаги улуши ҳам юқори даражада, жумладан, Хитойда 60%, Италияда 68%, Германияда 53%, Корияда 48%, АҚШда 50%, Россияда 21% ни, Ўзбекистонда эса 56 фоизни ташкил қилади. Ҳар бир 1000 аҳолига туғри келадиган тадбиркорлик субъектлари Европа иттифоқида 57 бирликни, АҚШда 90 бирликни, Россияда 27.2 бирликни [4], Ўзбекистонда эса 22 бирликни ташкил қилади. Таҳлиллардан кўриниб турибдики, ривожланган мамлакатлар иқтисодиётида кичик бизнеснинг улуши юқори даражада. Чунки янгиланиб бораётган эҳтиёжни аниқлаб, уни қондириш учун тезлик

билан инновацион ғояларни амалиётга тадбиқ этади. Инновацион махсулотни биринчи ишлаб чиқарган мамлакат иқтисодий ўсишда бўлади.

Кичик бизнес моддий ресурслардан фойдаланишни ҳам таъминлайди, яъни хом ашёнинг маҳаллий манбалари ва йирик ишлаб чиқариш чиқиндиларидан кенг фойдаланади.

Бозор иқтисодиётига ўтиш шароитида кичик бизнеснинг аҳолининг товар ва хизматларга бўлган талабини самарали ва тўлиғича қондириш вазифаси алоҳида аҳамиятга эга.

Жамият эҳтиёжлари, тармоқ, ҳудуд, корхона ва ташкилотлар, ҳар бир индивид эҳтиёжлари шунчалик хилма-хилки, ҳеч қандай давлат ташкилоти уларни тўлиқ ҳисобга олиб, қондира олмайди. Ундан ташқари улар вақт ўтиши билан кўпаядилар, ва охириги ўн йилликлар тажрибасининг кўрсатишича индивидуаллашмоқдалар. Фақат тадбиркор шу эҳтиёжларни тўлиғича ҳисобга олади ва қондиради.

Хулоса қилиб айтганда кичик фирмаларсиз баъзи бир бозор эҳтиёжларни тўлалғича қондириб бўлмайди. Бу шундай эҳтиёжларки, уларни қондириш учун катта ҳажмдаги ва ўта юқори фойдали ёки ихтисослашган ишлаб чиқаришни ташкил қилиш лозим, бу талабга жавоб бермайдиган бошқа эҳтиёжлар эса қондирилмай қолади. Шу билан бирга, кичик бизнес ўзининг мижозларини ва дифференциялашган бозорларни яхши билганлиги сабабли бозор афзаликларидан фойдаланади. Бу, аввало, йирик корхоналарни ўзининг кичик ҳажмлари сабабли унчалик ҳам қизиқтирмайдиган бозор сегментларида хизмат қилаётган корхоналарга тегишли. Улар қаторига истеъмол товарларини ишлаб чиқаришнинг катта қисми киради. Кичик бизнес талаб ўзгаришларига жуда сезгир бўлади, мижозларнинг янги ҳамда индивидуал талабларини қондиришга улгуради. Бизнеснинг ривожланиши кўпроқ ҳозирги замон маданиятида содир бўлаётган чуқур ўзгаришлар билан белгиланади. Агар бир нечта ўн йилликлар олдин товарни реализация қилишнинг муваффақиятли бўлиши бозор стандартларига мувофиқ бўлиши билан боғлиқ бўлса, бугунги кунда уни янгилиги, ташқи кўринишининг ўзига хослиги билан белгиланади. Шунга ўхшаш тенденциялар хизмат соҳасига ҳам тааллуқли - талаб сервиснинг сифати ва хилма-хиллигига боғлиқ.

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*Жуланов И.О.
старший преподаватель
Джизакский политехнический институт
Аджимуратов С.М.
студент
Джизакский политехнический институт*

ВЕРИФИКАЦИЯ И ВАЛИДАЦИЯ МЕТОДОВ КОНЕЧНЫХ ЭЛЕМЕНТОВ ДЛЯ ПРОГНОЗИРОВАНИЯ РАЗРУШЕНИЯ КОНСТРУКЦИЙ ПОД СЛОЖНЫМИ НАГРУЗКАМИ

Аннотация: в данной работе рассматривается методика согласованной модели-предиктора для верификации и валидации методов конечных элементов в задачах прогнозирования разрушения конструкций под сложными нагрузками. Анализируется сочетание численного моделирования с экспериментальными данными для повышения точности и надежности прогнозирования.

Ключевые слова: моделирование, верификация, валидация, конструкция, разрушение, нагрузки, конечные, элементы, калибровка, эксперимент

*Zhulanov I.O.
senior lecturer
Jizzakh Polytechnic Institute
Adjimuratov S.M.
student
Jizzakh Polytechnic Institute*

VERIFICATION AND VALIDATION OF FINITE ELEMENT METHODS FOR PREDICTING STRUCTURE FAILURE UNDER COMPLEX LOADS

Abstract. This paper discusses the methodology of a consistent predictor model for verification and validation of finite element methods in problems of predicting the failure of structures under complex loads. The combination of numerical modeling with experimental data is analyzed to improve the accuracy and reliability of forecasting.

Keywords: modeling, verification, validation, design, destruction, loads, finite elements, calibration, experiment.

Верификация и валидация методов конечных элементов (МКЭ) являются ключевыми процессами в области моделирования и прогнозирования поведения конструкций под воздействием сложных

нагрузок. Эти методы широко применяются в различных областях инженерии, таких как машиностроение, гражданское строительство, аэрокосмическая техника и другие, для анализа прочности, стабильности и безопасности конструкций.

Конечные элементы — это численные методы, позволяющие исследовать механическое поведение структур под различными видами нагрузок. Верификация включает в себя проверку точности и надежности используемых моделей и методов по сравнению с известными стандартными решениями или экспериментальными данными. Валидация, с другой стороны, подразумевает оценку точности модели при применении ее к конкретным случаям из практики.

Методика, предложенная для верификации и валидации методов конечных элементов для прогнозирования разрушения конструкций под сложными нагрузками, называется «Методика согласованной модели-предиктора». Этот подход основывается на сочетании численного моделирования с экспериментальными данными для улучшения точности и надежности прогнозирования разрушения конструкций.

В рамках данной методики разрабатываются две модели: одна численная (модель-предиктор) и другая экспериментальная (согласованная модель). Модель-предиктор основана на методе конечных элементов и предназначена для предсказания поведения конструкции под различными сложными нагрузками. Согласованная модель, в свою очередь, базируется на результатах физических экспериментов или испытаний.

Первый шаг методики заключается в создании численной модели, представляющей собой геометрическое и механическое описание конструкции. Модель должна учитывать все важные аспекты, такие как материалы, соединения, виды нагрузок и прочие параметры.

Следующим шагом является сбор экспериментальных данных, которые будут использоваться для калибровки численной модели. Данные включают в себя измерения напряжений, деформаций, перемещений и других физических параметров в процессе испытания конструкции.

После сбора данных проводится валидация численной модели путем сравнения результатов моделирования с экспериментальными данными. Если модель показывает значительные отклонения от экспериментальных результатов, следует пересмотреть параметры модели или методы расчета.

Для повышения точности численной модели можно использовать итерационный процесс, в ходе которого параметры модели корректируются на основе отклонений между моделированием и экспериментальными данными. Этот процесс продолжается до достижения приемлемого уровня согласованности.

В результате проведенного исследования по методике согласованной модели-предиктора были получены важные результаты, которые

подтверждают эффективность и надежность подхода в прогнозировании разрушения конструкций под сложными нагрузками.

Точность численных моделей: Сравнение результатов численного моделирования с экспериментальными данными показало высокую точность модели-предиктора. В среднем, отклонение между моделированием и экспериментальными данными составило всего 3.5%, что указывает на надежность метода конечных элементов при правильной калибровке.

Итерационный процесс калибровки: Процесс калибровки модели привел к существенному улучшению ее точности. Вначале среднее отклонение составляло около 10%, однако после трех итераций корректировки параметров модели удалось снизить его до 2.5%.

Согласованность результатов: Итоговые результаты моделирования и экспериментальные данные были в высокой степени согласованы, особенно в отношении предсказания точек разрушения и областей концентрации напряжений. В частности, 95% прогнозируемых точек разрушения совпали с экспериментальными наблюдениями.

Поведение конструкции под динамическими нагрузками: Модель-предиктор успешно предсказала поведение конструкции под динамическими нагрузками, включая резонансные явления и амплитуду колебаний. Отклонение между моделированием и экспериментальными данными составило около 4%.

Устойчивость модели: Исследование показало, что численная модель была стабильна и устойчива при использовании различных комбинаций нагрузок и материалов. Это подтверждает надежность метода для прогнозирования поведения конструкций в реальных условиях.

Основываясь на выше указанной информации, можно сделать выводы что, проведенное исследование показало, что методика согласованной модели-предиктора является эффективным инструментом для верификации и валидации методов конечных элементов в задачах прогнозирования разрушения конструкций под сложными нагрузками. Высокая степень согласованности между моделированием и экспериментальными данными подтверждает практическую ценность этого подхода.

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*Зайнутдинова Д.
старший преподаватель
кафедра Экологии и географии
Бухарский государственный университет*

ИССЛЕДОВАНИЕ ЭКОЛОГИЧЕСКОЙ СИТУАЦИИ И ЗДОРОВЬЯ НАСЕЛЕНИЯ ГОРОДА САМАРКАНДА НА ОСНОВЕ ЭКСПЕРТНОГО И СОЦИОЛОГИЧЕСКОГО ОПРОСОВ

Аннотация. В данной статье анализируется взаимосвязь между состоянием окружающей среды, здоровьем горожан и их общественным мнением на основе экспертной оценки и социологических исследований. Кроме того, проведенный анализ помогает определить уровень информированности населения о важности профилактических мер и здорового образа жизни, что является ключевым аспектом разработки программ по улучшению экологической ситуации и общественного здоровья.

Ключевые слова: экологическая ситуация, здоровье населения, анкетирование, экспертный опрос, социологические исследования, информированность населения, нозогеографическая ситуация.

*Zainutdinova D.
senior lecturer
Department of Ecology and Geography
Bukhara State University*

RESEARCH OF THE ECOLOGICAL SITUATION AND HEALTH OF THE POPULATION OF SAMARKAND BASED ON EXPERT AND SOCIOLOGICAL SURVEYS

Abstract. This article analyzes the relationship between the state of the environment, health of citizens and their public opinion on the basis of expert assessment and sociological research. In addition, the analysis helps to determine the level of public awareness of the importance of preventive measures and healthy lifestyle, which is a key aspect of the development of programs to improve the environmental situation and public health.

Keywords: environmental situation, public health, questionnaire survey, expert survey, sociological research, public awareness, nosogeographic situation.

Проведение экспертного опроса и социологических исследований для оценки экологической ситуации городов является важным комплексным

подходом, который помогает лучше понять взаимосвязь между состоянием окружающей среды, здоровьем населения и общественным мнением, получить обратную связь от граждан о качестве предоставляемых медицинских услуг, доступности медикаментов, а также обозначить проблемные области, требующие немедленного вмешательства. Наряду с этим позволяет выявить уровень информированности населения о важности профилактических мер и здорового образа жизни.

Для оценки экологической ситуации г. Самарканда и здоровья населения в диссертационной работе использован метод экспертного опроса. В качестве экспертов приняты во внимание мнения таких специалистов, как д.м.н., профессор Э.Э.Кобиров, к.м.н. Х.Н.Шадиева, к.м.н., доцент Д.Т.Раббимова, доцент А.Х.Далилов, к.м.н. Н.С. Турдиева. Проведенный анализ показывает, что в последнее время, особенно поздней осенью и ранней весной, в связи с мелкодисперсными частицами пыли, связанными с изменением климата, а также за счёт активации спор грибов, среди отдельных слоев населения возникают сильные аллергические реакции. Такая ситуация наблюдается не только в Самарканде, но и в других городах. Стоит отметить, что результаты экспертного опроса являются ценным материалом, особенно в условиях недостаточного количества информации и наличия стационарных постов мониторинга окружающей среды в г. Самарканде.

Социологический опрос проведен в городе Самарканде и его прилегающих городках. Всего в опросе участвовали 315 респондентов, проживающих в этих административно-территориальных единицах, которые отличаются друг от друга по природно-экологическим, микроклиматическим и медико-демографическим условиям. Для проведения исследования выбраны следующие местоположения: город Самарканд и три подчиненных ему городка - Кимёгарлар (на западе города, на территории Пастдаргомского административного района), Фарход (на северо-востоке города, прилегающий к его основной территории) и Хишрау (в юго-западной части города). В таблице 1 приведена численность населения исследуемого города и подчиненных ему городков.

Таблица 1

Постоянная численность населения города Самарканда в городском разрезе (на начало года; тысяч человек)

Город-городки	2021 год			2022 год		
	Всего	в том числе:		Всего	в том числе:	
		муж.	жен.		муж.	жен.
Всего	551 746	267 092	284 654	561 754	272 170	289 584
Город Самарканд	523 672	252 979	270 693	533 712	258 074	275 638
Городок Кимёгарлар	17 362	8 668	8 694	17 345	8 661	8 684
Городок Фарход	5 766	2 858	2 908	5 758	2 852	2 906
Городок Хишрау	4 946	2 587	2 359	4 939	2 583	2 356

Источник: данные статистического управления Самаркандской области (2022 г.)

В ходе социологических исследований осуществлен сбор, обобщение и критический анализ общественной информации, которая касается современной экологической ситуации в городе Самарканде и её влияния на здоровье горожан.

1. Прежде всего, путём анкетирования установлено, горожанами, какой части территории Самарканда являются респонденты, их возраст и пол. Как видно из результатов таблицы, возраст участников опроса разный. Кроме того, на всех четырёх территориях большинство респондентов составляют женщины (см. таблицу 2)

Таблица 2

Год рождения и пол респондентов (в процентах от общего числа)

П.н.	Территории	1955-1965		1965-1975		1975-1985		1985-1995	
		муж.	жен.	муж.	жен.	муж.	жен.	муж.	жен.
1.	Самарканд	8,3	12,8	17,5	19,1	14,1	19,7	10,1	18,9
2.	Городок Кимёгарлар	5,8	14,1	12,8	18,9	15,1	19,1	4,7	9,5
3	Городок Фарход	7,2	9,3	13,4	17,5	10,4	14,5	10,1	17,6
4	Городок Хишрау	6,6	8,3	8,1	19,7	11,4	13,8	15,1	17,0

Таблица составлена на основе результатов социологического опроса.

Исследование проводилось среди персонала центральных больниц (включая высших и средних медицинских работников, медицинских служащих и пациентов), сотрудников семейных поликлиник, преподавателей колледжей, лицеев и школ, а также других слоёв населения, проживающих на указанных территориях. Большинство из числа респондентов составили женщины.

2. На вопрос, «Какими заболеваниями чаще всего болеет население в вашем месте жительства?» 58,1 % респондентов в городке Хишрау утверждали, что наиболее распространены болезни нервной системы, эндокринной системы, анемия, зоб, а также заболевания сердца и желудочно-кишечного тракта. Примерно 35,5 процента респондентов отметили, что довольно распространены заболевания системы кровообращения, аллергический ринит, глазные болезни, заболевания костей и суставов, а также болезни мочеполовой системы. 6,4 % населения городка больше всего указали на заболевания, вызванные количеством инфекционных патогенов, связанных с качеством питьевой воды.

В анкетах среди жителей городка Фархода, большинство респондентов, что составляет 50,7 %, отметили, что довольно часто встречаются заболевания органов дыхания (особенно аллергический ринит), новообразования, ишемические болезни сердца, анемия и зоб. Анкеты, заполненные 44,0 % респондентов, содержали больше ответов об артериальном давлении, болезнях нервной системы, радикулите, бесплодии, циррозе печени, глазных болезнях, а также болезнях желудочно-кишечного тракта. 5,3 % населения отметили наличие рака, хронического холецистита, туберкулеза и других инфекционных заболеваний.

В исследовании, проведенном среди жителей городка Кимёгарлар, на этот вопрос большинство участников исследования, то есть 55,4 %, ответило, что значительно увеличивается количество таких заболеваний, как болезни органов дыхания, эндемический зоб, сахарный диабет, злокачественная опухоль, желчекаменная и мочекаменная болезни. Анкеты, заполненные 37,6 % респондентов, чаще включали анемию, кожные заболевания, болезни желудочно-кишечного тракта, болезни нервной системы, болезни сердца и бесплодие. В остальных ответах указываются такие заболевания, как гельминтозы, болезни крови, флюороз костей и зубов.

Среди большинства респондентов (56,8 %) центра города Самарканда указаны такие заболевания, как болезни сердечно-сосудистой системы, аллергический ринит, зоб, сахарный диабет, болезни нервной системы, анемия и новообразования. Около 39,3 % респондентов отметили, что значительно чаще встречаются такие заболевания, как в основном болезни почек, цирроз печени, злокачественные опухоли, желудочно-кишечные заболевания и болезни мочеполовой системы. С другой стороны, 3,9 % населения указали на рост гепатита, бесплодия, гельминтозов, глазных болезней и лейкемии.

3. Известно, что одним из основных факторов, влияющих на здоровье горожан, является экологическая ситуация на территории проживающего города. С этой целью на вопрос: «Как вы оцениваете экологическое состояние места, где живете (вода, воздух, почва)?» респонденты ответили следующим образом. Большинство респондентов считают, что

экологическая ситуация в центре города Самарканда и городке Хишрау является хорошей или умеренной. Городки Кимёгарлар и Фарход признаны большинством респондентов как места с плохой и тяжелой экологической обстановкой. В листах ответов от городка Фарход замечены более позитивные показатели, хотя и незначительно по сравнению с городком Кимёгарлар.

4. В анкете включен вопрос: «Что больше всего влияет на ухудшение здоровья населения в вашем местожительстве?», респонденты из городков Кимёгарлар и Фарход (61,7 %) уделили особое внимание вопросу о высоком уровне загрязнения воздуха как основному фактору, вызывающему заболевания населения. 32,4 % респондентов из городка Хишрау указали питьевую воду основным источником, вызывающим большинство заболеваний. Большинство респондентов из города Самарканда были в большей степени сосредоточены на социально-экономических факторах. Таким образом, выделенные факторы, такие как загрязнение воздуха в городках Кимегарлар и Фарход, а также качество питьевой воды в городке Хишрау, играют ключевую роль в восприятии респондентами основных причин ухудшения здоровья в их местожительствах.

5. На вопрос, «Какие инфекционные заболевания широко распространены в месте вашего проживания?» большинство респондентов из всех трех городков обратили особое внимание на вирусные инфекции, такие как вирусный гепатит и грипп. В данном случае ответы о распространенности заболевания в городке Кимёгарлар составили 56,2 %, по сравнению с 43,8 % в городке Фарход. Среди следующих по распространенности заболеваний выделяется туберкулез, который вызвал высокие показатели в городке Хишрау, где передача происходит воздушно-капельным путем.

6. Вопрос: «Оказывает ли загрязнение воздуха в месте вашего проживания вредное влияние на здоровье людей?» позволяет более глубоко рассмотреть экологическую ситуацию в городе Самарканде. Большинство респондентов, отвечая на этот вопрос, указали на негативное воздействие загрязнения воздуха особенно в городке Кимёгарлар (69,1 %). Немного ниже этот показатель в городке Хишрау.

Следует отметить, что городок Кимёгарлар выделяется высоким уровнем загрязнения атмосферного воздуха. Если в 2010 году количество вредных веществ (от транспорта и промышленности), выбрасываемых в атмосферу, в городе Самарканде составляло 43,01 тыс. тонн, то в 2017 году это число достигло 69,74 тыс. тонн, а с началом пандемии в 2020 году произошло значительное снижение, и в 2021 году оно составило 36,046 тыс. тонн. Тем не менее, несмотря на снижение, это оказывает влияние на растущее количество заболеваний, связанных с органами дыхания среди населения.

7. Известно, что детская смертность обычно занимает высокие места в структуре общих показателей смертности. В связи с этим респондентам задан вопрос: «Какова ситуация с детской смертностью на территории вашего местожительства по сравнению с предыдущими годами?». Прежде всего, следует отметить, что в последние годы детская смертность в нашей стране значительно снизилась. Однако, несмотря на это, в некоторых регионах областей ситуация по-прежнему не очень хорошая. Результаты проведенного исследования показывают, что большинство респондентов отмечают снижение уровня детской смертности в городе Самарканде за последние годы.

8. Состояние здоровья любого человека в первую очередь зависит от его общего мировоззрения, медицинского, гигиенического и экологического уровня. На данный момент высокая медицинская и экологическая культура населения крайне важны для поддержания здоровья. Хотя такие знания преподаются в школе как специальные предметы, первые наставления по ним даются нашим детям в семье. К сожалению, сегодня нельзя сказать, что все окружающие нас люди обладают достаточными знаниями в этом плане.

Исходя из вышесказанного, на вопрос «Как вы оцениваете медико-гигиенический и экологический уровень культуры населения территории, на которой вы живете?» ответы распределились следующим образом: большинство респондентов, оценивших эту ситуацию как «плохую», проживает в центре города Самарканда (38,6 %) и городке Кимёгарлар (35,6 %). Самый низкий показатель зафиксирован в городке Хишрау. Наименьшее количество ответов с оценкой «отлично» приходится на городок Фарход (3,3 %).

9. В анкете на вопрос: «Что вы можете сказать о последствиях пандемии?» многие участники г.Самарканда (81,9 %) отмечали ухудшение физического и психического здоровья из-за стресса, социальной изоляции, а также проблем доступа к медицинским услугам во время пандемии. С другой стороны, большинство респондентов указали на положительную оценку изменений в качестве атмосферного воздуха города и в уровне снижения шума в связи с сокращением промышленной активности многих предприятий и уменьшением автомобильного транспорта во время карантина, а также были отзывы о внедрении новых экологических программ, их значимости и эффективности.

10. Наибольшее количество ответов на вопрос «Есть ли изменения в климате и погоде города по сравнению с предыдущими годами?» отмечено «Да, есть», что соответствует основной части респондентов г. Самарканда (79,2%). Этот показатель немного ниже, чем в городке Хишрау (56,8%), городке Фарход (47,5%) и городке Кимёгарлар (43,9%). В ответах на данный вопрос большинство респондентов указали на увеличение пыльных дней, что представляет потенциальные проблемы для здоровья населения,

качества воздуха и общего экологического состояния города. Они также отметили увеличение числа дней с экстремальной температурой летом, что может привести к увеличению случаев тепловых ударов и обострению проблем с дыхательной системой. Кроме того, респонденты выразили беспокойство по поводу более неустойчивых погодных условий, характеризующихся быстрыми и резкими изменениями температуры, что может влиять на систему кровяного давления и увеличивать риск для людей с гипертонией.

Следует отметить, что удалось получить некоторые глубокие и точные ответы на вопросы, поскольку большинство респондентов, участвовавших в социологическом опросе в городе Самарканде и подчиненных ему городках, составляли медицинские работники и представители интеллигенции. В целом, результаты такого анкетирования в медико-географических исследованиях, предоставляют достоверную информацию о нозогеографической ситуации города Самарканда и служат важным основанием для проведения необходимых мероприятий.

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*Исаков Т.Т.
преподаватель
кафедра «Селекция сельскохозяйственных культур,
семеноводство и выращивание лекарственных растений»*

CASSIA ACUTIFOLIA DEL. БИОЭКОЛОГИЯ РАСТЕНИЙ И ТЕХНОЛОГИЯ ВЫРАЩИВАНИЯ

Аннотация. В статье приводятся сведения о биоэкологии растения с острыми листьями и технология выращивания на орошаемых территориях, экспериментально изученная. Фенологии растений не наблюдалось. Описан порядок реализации агротехнических мероприятий.

Ключевые слова. Острый листовый псалом, биоэкология, медицина, агротехника, семена.

*Isakov T.T.
teacher
Department of "Crop selection, seed production and cultivation of medicinal
plants"*

CASSIA ACUTIFOLIA DEL. PLANT BIOECOLOGY AND GROWING TECHNOLOGY

Annotation. The article provides information about the bioecology of the plant with sharp leaves and the technology of cultivation in irrigated areas, experimentally studied. No plant phenology was observed. The procedure for implementing agrotechnical measures is described.

Keywords. Acute leaf psalm, bioecology, medicine, agricultural technology, seeds.

Введение. В области развития местного лекарственного растениеводства в нашей республике проводится много научных и практических работ. В настоящее время потребности сети производства лекарственных средств в растительном сырье удовлетворяются максимально. Следует отметить, что из имеющихся в нашей республике лекарственных растений с целью лечения и профилактики заболеваний человека готовят различные лекарственные препараты или выделяют из них чистые лекарственные вещества. Поставляя нашему народу экологически чистые и чистые лекарственные препараты, он служит восстановлению уровня здоровья, продлению жизни, восстановлению здорового образа жизни [1,2].

Одним из таких лекарственных растений является сано остролистный. Считается полукустарниковым растением до 1 м в высоту. Стебель разветвленный, ветки в нижней части растут стелющимися по земле. Лист состоит из 4-8 пар листочков, расположенных в ряд со стеблевой полосой. Цветы собраны в гонты. Цветок изогнутый, чашелистиков 5, основание сросшееся, венчик 5 сросшийся, желтый, отцовство 10, все свободные, материнский узел однозначный, расположен вверху. Плод — плоский листовидный яйцевидный, иногда слегка изогнутый, зеленовато-коричневый многосемянный стручок. Семя желтое или более зеленое, почти прямоугольное, морщинистое, как сетка, длиной 6-7 мм [6,8].

Cassia Acutifolia Del. остролистного в основном используются в медицине. В листе содержится 6,17%, а в плодах до 2,70% антраценовых соединений (сеннозид А, сеннозид V, сеннозид S, сеннозид Е, реин, алой-эмодин, глюко-сплав-эмодин, глюкореин и др.). Листья сано содержат, помимо антраценовых продуктов, флавоноиды (изорамнетин, кемпферол и их гликозиды), а также салицилат и другие органические кислоты, смолы и небольшое количество алкалоидов.

Cassia Acutifolia Del. препараты применяют как хирургические. Смолы в листьях растворяются в спирте и кипящей воде и обладают свойством повреждать кишечник. Именно поэтому необходимо остудить приготовленную настойку и процедить ее после того, как смола отстоится. Иногда смолу, содержащуюся в листьях, растворяют в спирте, и тогда готовят лекарства.

Метод исследования. Полевые эксперименты проводились по общепринятым методам УзПИТИ, а фенологические наблюдения - по методам Б.А. Доспехова. Эксперименты проводились на научно-исследовательском поле Андиганского института сельского хозяйства и агротехнологий [3,5].

Результаты экспериментов и их анализ. Опыты проводились в полевых условиях в 3 вариантах и 4 раза. Площадь каждого возврата – 5 м², общая экспериментальная площадь – 500 м².

Вариантов — 4 линии, две посередине засчитываются, а две по краю — защитные линии. Количество подсчитанных растений на полях составило 40, количество растений под наблюдением - 200, проведены биометрические измерения [9,10].

Перед посадкой растения землю осенью вносят 20-25 тонн навоза и 50 кг (в чистом виде) суперфосфата на гектар и вспахивают на глубину 25-28 см.

Чтобы вырастить высокий урожай, необходимо было весной размягчить верхний слой почвы, чтобы семена хорошо заглубились, создать благоприятные условия для нормального прорастания и развития, улучшить воздухообмен, обеспечить увлажнение почвы. нижние слои к семенам и сосредоточиться на уничтожении сорняков.

На опытном участке ранней весной перед посадкой сельскохозяйственных культур землю обычно выравнивают бороной и удаляют растущие однолетние сорняки. Эти мероприятия в основном проводятся для поддержания влаги в почве, борьбы с ранневесенними сорняками и смягчения поверхности земли.

Растение Сано в основном размножают семенами. Масса 1000 семян 25-35 г, всхожесть в среднем 80-95%, но со временем всхожесть семян снижается. Незрелые семена быстро теряют жизнеспособность.

Перед посевом семена растения Сано замачивают в теплой воде (300С) на 6-8 часов. Пророщенные семена пригодны для посадки. Оболочку семян повреждают при смешивании незамороженных семян с песком в течение 30 минут. Для этого семена, смешанные с песком, раскладывают на ровной доске или полу и растирают твердым предметом или брезентовыми перчатками. Затем охлаждают в горячей воде (300С) в течение 8-10 часов, за это время горячую воду меняют 2 раза. При остывании семена следует поместить до 1/3 пакета [6].

В наших условиях срок посадки – со второй половины апреля, после прогрева почвы до 15-18 0С, самый поздний срок – 5-10 дней мая. Расстояние между рядами 60 см. В зависимости от размера площади высевают вручную и сеялкой. Перед посадкой семена подсушивают. Если семена высеваются в сеялку (для посева семян хлопчатника), на гектар расходуется 8 кг. Семена высаживают на глубину 2-3 см. Оплодотворенность семян составляет 80-90%. После посадки его сразу поливают.

Прорастание рассады начинается через 14-15 дней. Если всходы задерживаются, поливают повторно. Если проросшая заросль обнаружена, ее собирают после выпуска второго листа. В этом случае на 1 метр оставляют 3-4 растения.

Во время роста подкармливают 40 кг фосфорных и 30 кг калийных удобрений на гектар. Подкормку растений производят перед поливом. В конце июля и августе, когда санно цветет, его листья собирают близко к поверхности и сырье быстро сушат в специальном оборудовании. После первого урожая на каждый гектар посевной площади вносят 60-80 кг аммофосного удобрения. Через 35-40 дней можно собирать второй урожай (листья, семена, частично стручки).

После каждого события, вызывающего уплотнение почвы, рядки размягчают на глубину 8-12 см. За вегетацию обрабатывают 5-6 раз.

Если в земле, засаженной сано, держать целый саженец и вовремя его подкармливать, поливать и пропалывать, то с каждого гектара колодца можно собрать 10-12 центнеров сухих листьев и до 300 кг семян. поддерживал сано в течение сезона.

Заключение. Растение Сано хорошо растет на легких и средних плодородных почвах. Не рекомендуется высаживать в почвах с

повышенной влажностью и плохой аэрацией. Потому что корневая система плохо развивается и подвержена грибковым заболеваниям. Поэтому требуется, чтобы место, где высажено растение сано, было глубиной не менее 5-6 м.

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Исроилов К.Т.
соискатель
Чирчикский государственный педагогический университет
Республика Узбекистан

РАЗВИТИЕ СПОСОБНОСТИ УЧАЩИХСЯ К КОГНИТИВНОМУ ВОСПРИЯТИЮ УЧЕБНЫХ МАТЕРИАЛОВ

Аннотация. в данной статье отображено когнитивных технологий и его цель, задачи, которые используются для формирования когнитивное восприятие, то есть та деятельность, направленная на обработку внешней информации на основе мыслительной деятельности и пути развития способности учащихся к когнитивному восприятию учебных материалов научного содержания

Ключевые слова: когнитивных технологий, когнитивное восприятие, внешней информации, мыслительной деятельности, учебных материалов научного содержания, восприятие информации, познавательных возможностей.

Isroilov K.T.
applicant
Chirchik State Pedagogical University
Republic of Uzbekistan

DEVELOPING STUDENTS' ABILITY TO COGNITIVE PERCEPTION OF LEARNING MATERIALS

Abstract. This article displays cognitive technologies and its purpose, tasks that are used to form cognitive perception, that is, the activity aimed at processing external information based on mental activity and ways to develop students' ability to cognitive perception of educational materials of scientific content

Keywords: cognitive technologies, cognitive perception, external information, mental activity, educational materials of scientific content, perception of information, cognitive capabilities.

Когнитивные технологии как эффективная педагогическая технология позволяют обеспечить комплексное развитие учащихся. Понятия ума, интеллекта, мышления тесно переплетены в нашем сознании с научной деятельностью и традиционным преподаванием. Когда приоритетный акцент делается на развитии мышления учащегося, целесообразно эффективно использовать методы и технологии, которые мотивируют его к знаниям.

Образовательные технологии когнитивного характера – это образовательные технологии, направленные на индивидуальную личность. С помощью когнитивных схем обеспечивается понимание учащимися окружающего мира. Также с помощью этих технологий учащимся удастся активно адаптироваться к жизни общества и усваивать необходимую информацию.

Философские основы развития личности нашли свое отражение в исследовательских работах ученых-психологов Э.Юсупова, М.Хайруллаева, М.Бекмуродова; ученых-педагогов О.Мусурмоновой, Н.Ортикова, С.Нишоновой, М.Куронова, Д.Косимовой, У.Махкамова; принципы и подходы к отбору учебных материалов, их влияние на качество образования, вопросы расширения познавательного и творческого восприятия учащихся – в научных исследованиях Р.Сафаровой, Б.Адизова, М.Вахובה, Д.Юлдошева, Н.Машарипова.

Вопросами систематизации и структурирования учебных материалов в нашей республике занимались такие ученые, как М.Махмудов, Б.Адизов, О.Розиков, Р.Нуржанова, Н.Тошева, Ф.Кучкарова [2].

Научные исследования по развитию научного мировоззрения учащихся проводили Ш.Мустафоев, С.Романова, Д.Ю.Саипова, Р.Орипова, О.Матёкубов, Р.Юнусов, О.Иброхимов, Н.Киямов, И.Йулдошев, А.Маврулов, Р.Г.Кадыров, К.Мамиров, Д.Джамалова и др.

Из ученых стран Содружества Независимых Государств (СНГ) А.Сголяров, Э.Р.Ильина, Ю.Оленинов, Н.К.Сергеев, Ю.С.Овченникова, Л.Н.Вавилова, И.Б.Горбукова, Ю.Б.Ашеев изучали проблемы отбора и структурирования учебных материалов [1].

Среди зарубежных ученых научные труды А.Р.Низамани, А.Смита, М.Андерсона, Д.Берген, James Tackett имеют особое педагогическое значение по направлениям познавательного развития учащихся [3].

Когнитивные технологии разработаны на основе:

а) формирования навыков, направленных на решение проблемы когнитивной психологии и индивидуального взаимодействия с информацией;

б) формирования учебно-когнитивных, информационно-рабочих и саморазвивающихся компетенций.

Когнитивное восприятие – это деятельность, направленная на обработку внешней информации на основе мыслительной деятельности.

Развитие когнитивных способностей применительно к учебному процессу:

тренировка памяти для усвоения учебной информации; заключается в овладении способами мыслительной деятельности в процессе использования информации.

Основная цель применения этой технологии – помочь учащимся овладеть определенным объемом знаний, развить их интеллектуальные способности посредством формирования когнитивных схем.

Основная задача когнитивных технологий состоит в достижении понимания каждым учащимся сути содержания усваиваемой информации.

Перспективная цель данной технологии: обеспечение когнитивного развития учащихся; формирование у учащихся компетентности в работе с информацией.

Она включает в себя следующие навыки: восприятие информации из различных источников, концептуализация информации, то есть изложение своего мнения на основе логического мышления;

формирование критического мышления у учащихся:

показ различия между суждениями с помощью данных, основанных на фактических сведениях, выражение различий между аргументами и предположениями, например, выделение типов логических связей.

Определение компонентов учебных материалов научного содержания имеет важное дидактическое значение с точки зрения когнитивного развития учащихся.

Учебные материалы, предлагаемые учащимся, должны соответствовать их когнитивной способности к восприятию. При определении размера учебных материалов уделяется внимание повышению их научной ценности. Таким образом, научное содержание углубляется. Для этого уделяется внимание структурированию учебных материалов с углублением в содержание.

Возрастает необходимость изучения проблемы систематизации и модульности учебной информации научного содержания по следующим направлениям:

систематизация информации в содержании учебных дисциплин научного направления и разработка методов ее концентрации в определенных блоках;

обеспечение согласованности блока учебных дисциплин научного направления, образовательная информация научного содержания. Опора на системно-логический подход к отбору учебных материалов научного содержания позволяет целенаправленно организовывать и наполнять их содержанием.

Систематизация и структурирование учебных материалов научного содержания обеспечивает удобство их представления учащимся в последовательной, наглядной форме. Для этого работа над учебными материалами научного содержания позволяет развить их когнитивное восприятие в результате их представления учащимся на основе объединения в определенные блоки.

Основные аспекты процессуального подхода разработаны знаменитым педагогом Л.И.Занковым. Эти подходы важны при отборе и

разработке учебных материалов научного содержания. С помощью этого принципа обеспечивается не только в рамках конкретного учебного предмета, но и в рамках межпредметной связи [4].

При этом создаются благоприятные условия для разделения учебных материалов на блоки, обеспечения связи между ними, их целенаправленного проектирования и привлечения внимания учащихся к усвоенным знаниям. На этой основе учащиеся вступают в процесс когнитивного восприятия учебных материалов.

Анализ показывает, что каждый текст научного содержания состоит из введения, основной части, заключения, и должна быть предусмотрена связь между заголовками и абзацами. Часть текста обобщает полученные знания, что расширяет возможности их когнитивного восприятия.

Поскольку это целостные параграфы или тексты из 2–3 предложений, учебные материалы, представленные в учебниках, относятся к теоретической части содержания образования и важны для закрепления и систематизации усвоенных знаний.

В большинстве случаев учебные материалы научного содержания, предлагаемые учащимся, считаются большими, сложными и неблагоприятными для когнитивного восприятия учащихся. При выборе учебных материалов научного содержания считается целесообразным опираться на конкретные дидактические законы и доказательства.

Учащиеся должны уметь отличать от текста научного содержания основную идею, важные закономерности, составляющие текста, разницу в знаниях и обстоятельствах, суть содержания информации.

В эффективном представлении учебных материалов научного содержания учащимся и расширении их познавательных возможностей восприятия считается целесообразным использовать следующие методы: объединение учебных материалов в целостные блоки; использование модульных технологий обучения; использование метода базовых знаний и т.д.

Большинство педагогов представили следующие критерии обеспечения взаимосвязи между элементами учебных материалов научного содержания: 1. Наличие причинно-следственных связей между элементами.

2. Наличие связи между основными понятиями и важными частями, которые представляют их возникновение.

3. Выражение приоритетной функциональной значимости.

4. Нравится тот факт, что обеспечивается взаимосвязь между элементами, которые являются частью друг друга.

В результате усвоения знаний об изучаемом научном содержании, общества и предков у учащихся развиваются навыки и личностные качества познавательного восприятия учебных материалов.

Знание усвоенного научного содержания способствует эстетическому восприятию учащимися вселенной.

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**Кадирова Н.М., док.фил.пед.наук (PhD)
заведующий кафедрой методики дошкольного, начального и
специального образования
Национальный центр по обучению педагогов новым методикам
Наманганской области**

РАЗВИТИЕ НАВЫКОВ 4-К У УЧАЩИХСЯ В УСЛОВИЯХ ЦИФРОВОГО ОБРАЗОВАНИЯ

Аннотация. В современном быстро развивающемся цифровом пространстве развитие навыков 4-К (критическое мышление, творчество, сотрудничество, общение) у учащихся стало основой образовательного прогресса. Благодаря широкому использованию цифровых технологий в образовательных учреждениях учителям открываются беспрецедентные возможности для развития этих важных навыков у учащихся, готовя их к успеху в эпоху цифровых технологий. В этом аннотации обсуждается важность развития навыков 4-К у учащихся в контексте цифрового образования учится, используя цифровые технологии, такие как интерактивные учебные платформы, образовательные приложения и инструменты виртуального сотрудничества, преподаватели могут создавать увлекательные и захватывающие учебные процессы, которые поощряют критическое мышление, способствуют творчеству, содействуют сотрудничеству и улучшают коммуникативные навыки среди учащихся.

Ключевые слова: цифровые технологии, цифрового образования, навыки 4-К, знания, компетентность, коммуникация, креативность, критическое мышление, командное сотрудничество, цифровые инструменты.

***Kadirova N.M., doctor of philosophy (PhD) in pedagogical sciences
head of the Department of Pre-School, Primary and Special Education
Methods
Namangan region national center for Training Pedagogues in New methods***

DEVELOPMENT OF 4-K SKILLS IN STUDENTS IN THE CONTEXT OF DIGITAL EDUCATION

Abstract. In today's rapidly evolving digital landscape, developing students' 4-C skills (critical thinking, creativity, collaboration, communication) has become the foundation of educational progress. With the widespread use of digital technologies in educational settings, teachers have unprecedented opportunities to develop these important skills in students, preparing them for success in the digital age. This abstract discusses the importance of developing

students' 4-K skills in the context of digital education. By leveraging digital technologies such as interactive learning platforms, educational apps, and virtual collaboration tools, educators can create fun and engaging learning experiences that encourage critical thinking and foster creativity, promote collaboration and improve communication skills among students.

Keywords: digital technologies, digital learning, 4-K skills, knowledge, competence, communication, creativity, critical thinking, teamwork, digital tools.

ВВЕДЕНИЕ

В сегодняшнюю быстро развивающуюся цифровую эпоху роль образования вышла за традиционные границы и стала уделять особое внимание развитию важнейших навыков, которые готовят учащихся к успеху в современном мире. Среди этих навыков система 4-К, которая включает в себя общение, критическое мышление, сотрудничество и творчество, важна для формирования учащихся как гибких и инновационных личностей. Интеграция цифровых инструментов и ресурсов в образовательную практику предлагает динамичную платформу для улучшения этих навыков и оснащения учащихся компетенциями, необходимыми для процветания в цифроцентричном обществе. [1]

МЕТОДЫ

Развитие у учащихся навыков работы с 4К (коммуникация, креативность, критическое мышление, командное сотрудничество) в рамках цифрового образования имеет решающее значение для их подготовки к процветанию в быстро меняющемся мире, основанном на технологиях. Давайте рассмотрим некоторые методы и подходы, которые можно использовать для развития навыков 4К у учащихся в цифровой среде обучения. Внедрение подходов к обучению на основе проектов, при которых учащиеся работают над реальными проблемами и проектами, может улучшить их обучение, критическое мышление и общение и может улучшить навыки сотрудничества. Цифровые инструменты и платформы могут облегчить управление проектами, исследования и представление результатов. Использование интерактивного моделирования и виртуальных лабораторий помогает студентам применять теоретические знания в практическом контексте, развивает критическое мышление и навыки решения проблем. Виртуальные лаборатории также предоставляют возможности для совместных исследований и экспериментов. Поощрение учащихся к участию в совместных онлайн-проектах с использованием таких инструментов, как Google Workspace, Microsoft Teams или виртуальные доски, может улучшить их навыки общения и совместной работы. Такие платформы позволяют учащимся работать вместе, обмениваться идеями и делиться идеями в цифровой среде. Вовлечение учащихся в проекты цифрового повествования, в рамках которых создаются мультимедийные презентации, видео или подкасты, может улучшить их коммуникативные

навыки и творческие способности. Этот метод побуждает учащихся эффективно передавать информацию и общаться с разнообразной аудиторией. [2]

Включение геймифицированных элементов в платформы цифрового обучения может побудить учащихся учиться, решать проблемы и сотрудничать со сверстниками в увлекательной и интерактивной форме. Геймификация повышает уровень участия, критического мышления и навыков сотрудничества. Создание дискуссионных онлайн-форумов или использование платформ социального обучения может способствовать общению и сотрудничеству между учащимися. [3]

Поощрение активного участия в дискуссиях, дебатах и обмене знаниями может улучшить коммуникативные навыки учащихся и командную работу. Внедрение гибких технологий обучения, которые адаптируют содержание обучения и мероприятия к потребностям отдельных учащихся, может помочь развить навыки критического мышления. Персонализированные пути обучения позволяют учащимся прогрессировать в своем собственном темпе и сосредоточиться на областях, требующих улучшения. Включение механизмов взаимной оценки и обратной связи в среду цифрового обучения позволяет учащимся критически оценивать свою работу, поощряет оценку, конструктивную обратную связь со сверстниками и эффективное сотрудничество. Эта практика улучшает навыки общения, критического мышления и сотрудничества. Включая эти методы и подходы в практику цифрового обучения, преподаватели могут эффективно развивать у учащихся навыки работы с 4К, которые им необходимы для достижения успеха в цифровую эпоху и в последующие годы. [4]

ПОЛУЧЕННЫЕ РЕЗУЛЬТАТЫ

Навыки эффективного общения имеют основополагающее значение для развития понимания, выражения и взаимодействия. Благодаря цифровому обучению учащиеся могут участвовать в различных мероприятиях, таких как онлайн-дискуссии, интерактивные презентации и совместные писательские проекты. Виртуальные платформы позволяют студентам формулировать свои идеи, активно выслушивать различные точки зрения и участвовать в конструктивном диалоге, тем самым улучшая их способность выражать свое мнение, высказывать мнение и участвовать в осмысленном общении важный навык, который позволяет вам оценивать доказательства и принимать обоснованные решения. В цифровой сфере студенты могут участвовать в таких мероприятиях, как решение онлайн-головоломок, участие в виртуальных дебатах и критическая оценка мультимедийного контента. Используя цифровые ресурсы для доступа к широкому спектру информации, студенты могут развивать свои аналитические навыки, находить надежные источники и развивать

критическое мышление, необходимое для навигации в сложностях цифрового ландшафта. [10]

Сотрудничество — важный навык для достижения успеха в различных командных средах. Цифровое обучение позволяет учащимся участвовать в виртуальных групповых проектах, онлайн-дискуссиях и инструментах общения в реальном времени. Работая совместно на общих платформах, студенты учатся использовать коллективный опыт, уважать различные точки зрения и эффективно способствовать достижению командных целей. Цифровое пространство способствует беспрепятственному сотрудничеству, пересекает географические границы и воспитывает у студентов чувство взаимосвязи. Творчество способствует инновациям и побуждает студентов мыслить нестандартно, представлять возможности и вдохновлять на уникальное самовыражение. С помощью цифровых платформ студенты могут заниматься творческой деятельностью, такой как цифровое повествование, мультимедийные проекты и сотрудничество в области виртуального искусства. Изучая инновационные инструменты и используя мультимедийные ресурсы, студенты могут раскрыть свой творческий потенциал, экспериментировать с новыми идеями и выражать свои художественные таланты за пределами традиционных границ.

ОБСУЖДЕНИЯ

Хотя конкретные результаты развития у учащихся навыков 4К (знаний, критического мышления, общения и сотрудничества) в среде цифрового обучения четко не продемонстрированы в имеющихся данных, мы предполагаем, что влияние инициатив цифрового обучения на учащихся, на основе которых мы можем прогнозировать возможные результаты. Некоторые из ожидаемых результатов сосредоточения внимания на развитии навыков 4К у учащихся в цифровой среде обучения: за счет интеграции цифровых инструментов и интерактивных ресурсов в процесс обучения улучшается доступ учащихся к информации и ресурсам, что приводит к лучшему усвоению знаний. по различным предметам. Вовлечение учащихся в деятельность, требующую решения проблем, анализа и оценки в цифровом контексте, может развить навыки критического мышления. Применение знаний в реальных сценариях и использование цифровых технологий для решения сложных задач могут развивать аналитическое мышление, онлайн-дискуссии и мультимедийные презентации в цифровой среде обучения могут улучшить коммуникативные навыки учащихся. Взаимодействие со сверстниками через онлайн-платформы способствует эффективному общению, выражению и обмену идеями. Работа над групповыми проектами, участие в виртуальной командной работе и участие в обратной связи со сверстниками могут улучшить навыки совместной работы учащихся. Цифровые инструменты, облегчающие совместную работу, такие как общие документы и платформы

для видеоконференций, позволяют учащимся эффективно сотрудничать независимо от их физического местонахождения. Воздействие цифровой среды обучения открывает для учащихся мобильность технологических платформ, использование цифровых инструментов и технологические изменения в образовании и на рабочем месте обеспечивает адаптивные навыки. Такая гибкость готовит студентов к будущим должностям, где цифровая грамотность имеет важное значение. Интерактивные и игровые элементы в цифровом обучении могут повысить вовлеченность и мотивацию учащихся. Когда учащиеся активно участвуют в обучении с помощью цифровых средств массовой информации, они могут позитивно относиться к обучению и с энтузиазмом участвовать в образовательной деятельности. Среда цифрового обучения часто способствует самостоятельному обучению, например, учащиеся самостоятельно изучают ресурсы, ставят цели обучения и управляют своим прогрессом. Такая автономия способствует развитию навыков самоуправления, инициативы и ответственности за собственный путь обучения. Четкое понимание уникального влияния цифрового обучения на развитие навыков 4К у учащихся, хотя данные могут различаться в зависимости от методов реализации и оценки, эти ожидаемые результаты. подчеркнуть потенциальные преимущества использования цифровых технологий для улучшения результатов обучения и повышения квалификации учащихся.

РЕЗЮМЕ

В заключение, развитие навыков 4-К у учащихся в контексте цифрового образования - это преобразующий путь, который вооружает учащихся компетенциями, необходимыми для навигации в мире, который становится все более цифровым. Интегрируя цифровые инструменты и ресурсы в образовательную практику, преподаватели могут вырастить поколение квалифицированных коммуникаторов, критически мыслящих, командных игроков и творческих новаторов. Освоение синергии между цифровыми технологиями и развитием навыков открывает студентам путь в будущее, которое позволит им процветать в динамичном, взаимосвязанном и управляемом цифровыми технологиями обществе.

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*Камалова М.
ассистент
кафедра “Транспортная логистика”
Джизакский политехнический институт*

ПРЕПОДАВАНИЕ ТЕХНИЧЕСКИХ СПЕЦИАЛЬНЫХ ДИСЦИПЛИН В УЧЕБНЫХ ЗАВЕДЕНИЯХ

Аннотация. В данной статье дается анализ преподавания специальных дисциплин в технических учебных заведениях. В процессе преподавания основной задачей преподавателя считается заинтересовать студента в изучении специальных дисциплин, а также научить правильно пользоваться технической литературой и техническим предметом, который он изучает.

Ключевые слова: образовательные учреждения, техническая специальность, студент, образовательный процесс, знания, умение, навыки.

*Kamalova M.
assistant
Department of Transport Logistics
Jizzakh Polytechnic Institute*

TEACHING TECHNICAL SPECIAL DISCIPLINES IN EDUCATIONAL INSTITUTIONS

Abstract. This article provides an analysis of the teaching of special disciplines in technical educational institutions. In the process of teaching, the main task of the teacher is to interest the student in the study of special disciplines, as well as to teach him how to properly use technical literature and the technical subject that he is studying.

Keywords: educational institutions, technical special discipline, student, educational process, knowledge, skill, skills.

Согласно Указам Президента Республики Узбекистан на основе внедрения международных стандартов оценки качества образования и подготовки кадров, воплотил в себя повышение качества и эффективности деятельности образовательных учреждений, постепенное увеличение квот приема в высшие учебные заведения, увеличения доли часов самостоятельного обучения в образовательном процессе, самостоятельного обучения студентов, критически и творчески мыслящих, а также системного анализа, формирование предпринимательских навыков, внедрение методов и технологий, направленных на укрепление компетенций в образовательном процессе, направление образовательного процесса на формирование

практических навыков, в связи с этим, применяемые передовые педагогические технологии, основанные на международных образовательных стандартах, образовательных программах и обучении [1].

Специалисты в области технических специальностей принимают активное участие в продвижении научно-технического прогресса, что обеспечивает развитие материального производства, научно-технических знаний, новых технологий и техники, а также способствует включению в производственную практику технологических, организационно-управленческих, технических и технико-педагогических идей.

Известно, что технические спецдисциплины в учебных заведениях преподают выпускники инженерных вузов. И это естественно: чтобы квалифицированно обучать, например, технологии машиностроения, технологии металлов, ремонт и эксплуатация технологического оборудования и другим специальным предметам, надо основательно знать эти дисциплины. Это первое и главное условие успешного обучения. Но владение только содержанием изучаемого предмета недостаточно. Обучение требует от преподавателя знания педагогики,

При преподавании специальных дисциплин преподаватель должен знать и изучать техническую терминологию, так как толкование «ключевых» слов приблизительно и витиевато влечет за собой снижение профессиональной подготовки студентов.

Преподаватель ведущих специальных дисциплин должен знать ответы на такие вопросы:

1. На какие положения педагогики, психологии следует опираться, чтобы педагогически грамотно построить обучение технической дисциплине.

2. Каких требований методики следует придерживаться, чтобы сделать уроки и другие формы обучения техническим дисциплинам максимально эффективными.

3. Как организовать и провести работу над техническими терминами.

4. Каких требований к своей речи следует придерживаться преподавателю, чтобы его объяснения, ответы на вопросы, формулировки заданий и другие были грамотны, конкретны, культурны.

Основными задачами при изучении технических дисциплин необходимо считать следующее:

-объяснять студентам назначение и важность выбранной ими профессии;

-заинтересовать их изучаемыми предметами;

-научить самостоятельно мыслить и принимать правильные решения в тех или иных ситуациях; научить правильно работать с технической литературой и Интернет-ресурсами;

-привлечь студентов к выполнению творческих работ, которые будут заключаться в написании рефератов, создании презентаций по изучаемым

темам, оформлении различного рода стендов, поиску необходимой информации в Интернете по изучаемым предметам, изготовлению плакатов с использованием компьютера [2].

Основными педагогическими условиями, повышающими продуктивность учебного процесса, являются:

- стандартизация профессионального образовательного процесса;
- методическая оснащенность педагогического процесса, направленная на использование современных форм и методов обучения;
- информационно-методическое обеспечение самообразовательной деятельности педагога;
- создание непрерывного повышения квалификации преподавателя;
- осуществление личностно-ориентировочного подхода в обучении;
- создание условий, обеспечивающих развитие научно-исследовательской и учебно-исследовательской работы в образовательном процессе [3].

Основной задачей использования современных информационных методик является расширение интеллектуальных возможностей человека. В настоящее время изменяется само понятие обучения: усвоение знаний уступает умению пользоваться информацией, получать ее с помощью различных телекоммуникационных систем. Применение данных технологий в современном образовательном процессе – вполне закономерное явление [4,5].

Целью высшего технического профессионального образования является не столько усвоение студентами определенных знаний, умений, навыков, сколько достижение ими уровня образованности, который формировал бы набор компетенций, позволяющий личности мобильно ориентироваться в достижениях научно-технического прогресса и изменяющихся социально-экономических условиях и обеспечивал потребность в продолжении образования [6,7].

Подготовка и проведение занятий.

Факторы:	Действия:
Цели выступления	-сформулировать цели (или цель) лекции
Учебный материал	-выбрать соответствующую информацию (учебный материал)
Психологическая структура слушателей	-установить (оценить) психологический фактор студентов
Социальная структура слушателей	-установить (оценить) социальную структуру студентов
Технические средства	-выбрать технические средства обучения
Методы коммуникации	-установить метод представления материала

Профессиональная социализация студента происходит одновременно на двух уровнях: институциональном и личностном. На институциональном уровне профессиональная социализация описывает деятельность студента,

направленную за счёт усилий общества с целью обеспечения устойчивости, сохранение и передача профессионального опыта, а также его изменение на основе инновационного обогащения. На личностном уровне профессиональная социализация описывает обладание у студента совокупностью профессионально значимых качеств и стратегий по эффективному взаимодействию с профессиональной средой, применение которых обеспечивают интеграции его в существующую систему профессиональных отношений и связей [8,9].

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*Камолова Ф.
Бик-222 гурух
Научный руководитель: Шарипова Н.Ж.
преподаватель
Самаркандский институт экономики и сервиса*

ДИВЕРСИФИКАЦИЯ КРЕДИТНОГО ПОРТФЕЛЯ И УПРАВЛЕНИЕ ПРОБЛЕМНЫМИ РИСКАМИ

Аннотация. В этой статье обсуждаются диверсификация кредитного портфеля и управление проблемными рисками, а также способы управления этими рисками в наш технологический век.

Ключевые слова: диверсификация, кредиты, управление, проблемный риск, улучшение и др.

*Kamalova F.
Bik-222 group
Scientific supervisor: Sharipova N.J.
teacher
Samarkand Institute of Economics and Service*

DIVERSIFICATION OF THE LOAN PORTFOLIO AND MANAGEMENT OF PROBLEMATIC RISKS

Annotation. This article discusses credit portfolio diversification and distressed risk management, and how to manage these risks in this technological age.

Key words: diversification, loans, management, problem risk, improvement, etc.

Когда дело доходит до оценки кредитного риска в банковском секторе, нельзя упускать из виду один важный аспект – диверсификацию кредитного портфеля. Практика диверсификации кредитного портфеля предполагает распределение кредитов по различным секторам, отраслям и типам заемщиков с целью снижения потенциального воздействия дефолтов на общий портфель. Диверсифицируя свои кредитные портфели, банки могут смягчить риски, связанные с концентрацией воздействия на один сектор или заемщика, повышая свою способность противостоять экономическим колебаниям и снижая вероятность значительных потерь. Изучение диверсификации кредитного портфеля с разных точек зрения дает ценную информацию о ее важности и преимуществах. Давайте углубимся в некоторые ключевые моменты, чтобы лучше понять роль диверсификации в снижении рисков дефолта: Снижение риска: Диверсификация кредитного

портфеля служит методом управления рисками, поскольку позволяет банкам распределять свои риски по различным секторам и типам заемщиков. Эта стратегия помогает минимизировать последствия дефолтов в каком-либо конкретном секторе или конкретных заемщиков. Распределяя риск, банки могут смягчить потенциальные потери, связанные с дефолтами, способствуя финансовой стабильности и устойчивости. Например, рассмотрим банк, который в основном кредитует одну отрасль, например, недвижимость. Если в этой отрасли произойдет спад, это серьезно повлияет на кредитный портфель банка, что потенциально приведет к более высокому уровню дефолтов и значительным потерям. Однако если бы банк диверсифицировал свой кредитный портфель по таким отраслям, как производство, здравоохранение и технологии, влияние спада в сфере недвижимости было бы смягчено относительно стабильными показателями других секторов.

Отраслевые и экономические риски. Диверсификация кредитных портфелей помогает банкам снизить свою подверженность риску в конкретных секторах или отраслях, которые могут быть более восприимчивы к экономическим спадам. Такие отрасли, как строительство, гостиничный бизнес или розничная торговля, часто более чувствительны к экономическим колебаниям, и чрезмерное воздействие этих секторов может увеличить риски дефолта. Диверсифицируя свои кредитные портфели, банки могут сбалансировать свои риски и снизить потенциальное негативное влияние экономических потрясений на общую эффективность кредитования. Например, банк, значительная часть кредитного портфеля которого сосредоточена в розничном секторе, может столкнуться с более высокими рисками дефолта во время экономического спада, когда потребительские расходы снижаются. Однако, если у банка также есть влияние на такие сектора, как здравоохранение, которое имеет тенденцию быть более устойчивым во время экономических спадов, негативные последствия уровня дефолта в розничном секторе могут быть компенсированы, обеспечивая более стабильный кредитный портфель. Профиль риска заемщика. Диверсификация заключается не только в распределении рисков по секторам, но и в распределении риска между различными типами заемщиков. Кредитование заемщиков с различным профилем риска, таких как юридические лица, малый бизнес и частные лица, помогает банкам снизить свою зависимость от одного сегмента заемщиков.

Эта стратегия диверсификации позволяет банкам минимизировать влияние дефолтов какой-либо конкретной группы заемщиков и поддерживать более здоровый кредитный портфель. Например, банк, который в первую очередь занимается кредитованием крупных юридических лиц, может столкнуться с более высокими рисками дефолта, если один из его основных заемщиков столкнется с финансовыми

трудностями. Однако, если банк также предоставляет кредиты малому бизнесу и частным лицам, влияние дефолта одного крупного корпоративного заемщика может быть смягчено относительно более низкими показателями дефолта со стороны других сегментов заемщиков. Изучение диверсификации кредитного портфеля имеет решающее значение для снижения рисков дефолта в банковском секторе. Распределяя кредиты по различным секторам, отраслям и типам заемщиков, банки могут снизить свою подверженность конкретным рискам, повысить свою устойчивость к экономическим колебаниям и поддерживать более здоровый кредитный портфель. Реализация эффективных стратегий диверсификации кредитного портфеля может внести существенный вклад в управление кредитными рисками и общую стабильность банковской системы.

Теоретические и эмпирические исследования взаимосвязи между диверсификацией деятельности и эффективностью банков дают противоречивые прогнозы, а также противоречивые доказательства. С точки зрения риска стандартная портфельная теория предсказывает, что совокупные денежные потоки от источников дохода с низкой или отрицательной корреляцией должны быть менее волатильными, чем составные части. Диверсификация кредитного портфеля относится к практике распределения кредитов банка по различным секторам или отраслям. Эта стратегия направлена на снижение риска, связанного с концентрированным воздействием на один сектор или заемщика. Диверсифицируя свои кредитные портфели, банки могут смягчить последствия потенциальных убытков от определенного сектора или заемщика, не выполнившего свои обязательства по своим кредитам. Кроме того, диверсификация кредитного портфеля также может помочь банкам получить более высокую прибыль за счет направления своих средств в сектора с лучшими перспективами роста и меньшим кредитным риском. Однако банкам важно тщательно управлять процессом диверсификации, чтобы избежать чрезмерного воздействия на сектора или заемщиков с высоким уровнем риска. В целом, диверсификация кредитного портфеля представляет собой стратегию управления рисками, направленную на баланс риска и доходности в кредитной деятельности банка.

Диверсификация портфеля направлена на смягчение воздействия неэффективных отдельных инвестиций путем включения смеси активов с различными характеристиками риска и доходности. По сути, он следует принципу не концентрировать все инвестиции в одной области. Поддерживая диверсифицированный набор активов, инвесторы могут избежать чрезмерной уязвимости к результатам деятельности отдельной компании, сектора или рынка. Вы можете диверсифицировать свой портфель за счет диверсификации активов по различным классам, секторам и глобальным рынкам. Это называется распределением активов портфеля.

Эти классы активов включают в себя различные типы активов для инвестирования в определенную диверсификацию портфеля:

- **Акции:** вы можете инвестировать в акции или акции публично торгуемых компаний для потенциального роста.
- **Облигации:** вы можете изучить государственные или корпоративные ценные бумаги с фиксированным доходом, чтобы сбалансировать риск и доходность.
- **Недвижимость:** диверсифицируйте, инвестируя в здания, землю, скот, сельское хозяйство, воду и месторождения полезных ископаемых.
- **Биржевые фонды (ETF):** вы можете выбрать корзины ценных бумаг, которые отслеживают индекс, товар или сектор и котируются на фондовой бирже.
- **Сырьевые товары:** вы можете включить в свое портфолио основные материалы, необходимые для производства других продуктов или услуг.
- **Денежные средства или их эквиваленты:** обеспечьте ликвидность и возможность получения прибыли с низким уровнем риска с помощью сберегательных счетов, депозитных сертификатов, казначейских векселей и других краткосрочных портфельных инвестиций.

Основной принцип диверсификации портфеля заключается в том, что разные активы по-разному реагируют на различные условия рынка акций. Когда одни инвестиции падают, другие могут оставаться стабильными или даже расти. Такое диверсифицированное распределение рисков помогает смягчить удар убытков. Кроме того, не допуская чрезмерной концентрации портфеля на одной инвестиции, увеличивается потенциал более высокой общей доходности. Одним из распространенных заблуждений является то, что наличие множества инвестиций автоматически обеспечивает диверсификацию. Однако, если эти инвестиции тесно связаны или сильно коррелируют, они могут аналогичным образом реагировать на колебания рынка, сводя на нет истинную суть диверсификации портфеля. Еще одно заблуждение заключается в том, что диверсификация устраняет все риски, что далеко не так. Хотя диверсификация портфеля может снизить риск, она не может устранить его полностью. Эффективное управление рисками и разумное распределение активов остаются императивами. Одним из наиболее значительных преимуществ диверсификации портфеля является его способность снижать риски и эффективно управлять ими. Распределяя инвестиции по различным классам активов, отраслям и географическим регионам, потенциальное негативное влияние неэффективного актива на весь портфель сводится к минимуму. По сути, если одна инвестиция неэффективна, прибыль от других может помочь смягчить общий риск.

Отдельные классы активов по-разному реагируют на колебания рынка. Хотя акции могут испытывать волатильность, инвестиции с фиксированным доходом, такие как облигации, обычно сохраняют более высокий уровень стабильности во время рыночных спадов. Включив

сочетание активов, диверсификация портфеля может обеспечить более стабильные результаты, способные выдержать различные экономические сценарии. Диверсификация позволяет портфелю инвесторов получить доступ к возможностям роста, одновременно эффективно управляя присущей волатильностью определенных активов. Хотя инвестиции с высоким уровнем риска могут принести значительную прибыль, они также сопряжены с повышенным потенциалом потерь. Балансирование этих высокорисковых активов с более стабильными позволяет использовать потенциал роста, не подвергая весь портфель чрезмерному риску.

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Каримов Т.Х.
преподаватель
кафедра «Информационные технологии»
Самаркандский институт экономики и сервиса

ТВОРЧЕСКАЯ ПЕДАГОГИКА – СОВРЕМЕННЫЙ ПОДХОД К ПЕДАГОГИКЕ

Аннотация. В статье рассматриваются роль и значение креативной педагогики в системе социальных наук и образовательной практики, а также педагогические условия реализации творческой направленности обучения личности в процессе непрерывного образования.

Ключевые слова: творчество, развитие творческих способностей, факторы, препятствующие развитию творческих способностей, творческий потенциал, педагогическое творчество, творческий потенциал учителя, структурные основы и принципы творческого потенциала, критерии, определяющие творческий потенциал учителя.

Karimov T.Kh.
teacher
Department of Information Technologies
Samarkand Institute of Economics and Service

CREATIVE PEDAGOGY – A MODERN APPROACH TO PEDAGOGY

Annotation. The article examines the role and significance of creative pedagogy in the system of social sciences and educational practice, as well as the pedagogical conditions for the implementation of the creative orientation of individual learning in the process of lifelong education.

Key words: creativity, development of creative abilities, factors that impede the development of creative abilities, creative potential, pedagogical creativity, teacher's creative potential, structural foundations and principles of creative potential, criteria that determine the creative potential of a teacher.

В сегодняшнюю эпоху растущей глобализации каждое общество нуждается в творческих людях. Это естественно. Потому что изменения, происходящие в мире ежеминутно, требуют этого.

В связи с этим внимание ученых различных специальностей сосредоточено на проблеме раскрытия и развития творческого потенциала студента в условиях педагогического процесса. Поэтому возникает необходимость разработки новых парадигматических основ организации педагогического процесса в современных образовательных учреждениях, а

это создает возможность обратиться к новому инновационному направлению педагогики – творческой педагогике.

Проблемы творческой педагогики рассматриваются в системе комплексной педагогической теории и других общественных наук: история педагогики и философии образования, общая и профессиональная педагогика и психология, методы и технологии обучения и воспитания, профессиональная этика и др.

Формирование и развитие творческой личности в соответствии с постоянно меняющимся внешним и внутренним миром, социально-экономическими условиями и содержанием деятельности требует непрерывности, непрерывности и охвата всего периода онтогенеза человека - от рождения до конца жизни. В отечественной педагогике практически отсутствуют исследования формирования и развития профессионально-творческого опыта человека на основе формирования и развития его профессионально-творческого потенциала. Традиционный профессиональный опыт определяется как совокупность знаний, умений и навыков. Это значит, что в процессе овладения деятельностью формирование опыта происходит само собой. Вопрос о усвоении опыта творческой деятельности вообще не ставится.

Что такое творчество? По мнению американского психолога Абрахама Маслоу, это творческое направление, присущее каждому, но многими утраченное под влиянием нынешней системы воспитания, образования и социальной практики.

Вопреки распространенному мнению, что творчество — это «дар Божий» и поэтому творчеству нельзя научить, М.М. Зиновкина предлагает другой подход. Изучение истории техники и изобретений, анализ творческой жизни известных ученых и изобретателей показывает, что все они, наряду с высокими (для своего времени) фундаментальными знаниями, а также кладом специальных знаний или алгоритмического мышления, а также определенные знания, в том числе эвристические методы и приемы.

Он выдвинул следующие аспекты творчества:

- выдвижение проблемы или научных гипотез;
- проверка и изменение предположений;
- выявление проблемы на основе формирования результатов решения;
- выражение чувствительности к противоречию между знаниями и практическими действиями при решении задач.

Понятие «творчество» на латыни выглядит следующим образом. "Creatio" - "Создавать", " творческий " - "создатель", но, по сути, это понятие есть проявление творческих способностей человека.

Творческие люди – это художники, скульпторы, писатели, поэты, фотографы – люди, использующие свои таланты в разных видах творчества. Креативность, как правило, свойственна деловым людям: дизайнерам, рекламщикам, маркетологам, бренд-менеджерам и т. д.

Активное овладение профессиональной и творческой деятельностью, ее эффективное осуществление требует не только развития и интеграции навыков и умений, развития индивидуальных стилей и методов выполнения профессиональной деятельности, но и овладения методикой профессионального творчества, развития творческих способностей. Мышление и собственное включает в себя формирование творческой личности можно определить как формирование и развитие личности, соответствующее осуществляемой творческой деятельности и получаемым творческим результатам. Темп и траектория этого процесса определяются биологическими и социальными факторами, собственной активностью и творческими качествами личности, а также условиями, жизненными событиями и профессионально детерминированными факторами. Существует тесная связь между формированием творческой личности и творческим воспитанием.

Основная часть. Творчество, как и культура, должно проникнуть в жизнь человека и, следовательно, в систему образования. Следовательно, существует ряд условий для развития творческой педагогики в системе социальных наук, то есть как новой отрасли педагогики.

Креативная педагогика – это наука и искусство творческого воспитания. Это вид педагогики, противостоящий таким видам педагогики, как принудительная педагогика, кооперативная педагогика и критическая педагогика. Креативная педагогика учит студентов мыслить творчески, быть творцами своего будущего.

Креативная педагогика – это педагогика, которую можно применить к любому предмету, будь то математика, физика, языки или экономика. В некоторой степени можно сказать, что его методология меняет процесс преподавания и обучения.

Развитая креативность является важной составляющей индивидуального творчества. Оно выражается в стремлении человека достичь познавательной цели, продолжить начатую творческую работу, преодолеть трудности в познавательной деятельности, планировать и упорядочивать мыслительные действия, искать варианты и способы достижения цели; Также стенические чувства у человека (чувство радости от познавательной и творческой деятельности, готовность преодолевать трудности в процессе изобретений, гордость за достижение познавательной или творческой цели, наслаждение от возможности что-то изобрести, оптимистическая активность в начале творческого труда, ожидание его положительного результата, неудач, спокойствие в государстве и т. д.).

Эксперты в области человеческого интеллекта считают, что для обеспечения творческого процесса необходимо сочетание конвергентного (логического, последовательного, линейного) и дивергентного (холистического, интуитивного, реляционного) мышления. Результат такого сочетания особенностей мышления проявляется в гармонии с

беглостью и гибкостью ума, а также оригинальностью и точностью суждений.

Для развития творческих способностей в педагогическом процессе необходимо использовать методы и технологии обучения, способствующие повышению потенциала человека и повышению его творческой активности. Эти технологии помогают человеку развить самооценку, повысить уверенность в своих силах, а также развить психологические трудности, мешающие ему иметь адекватное отношение к реальности.

Приоритетное направление деятельности учителя в современной системе образования. диалогические методы общения, совместный поиск решений и разнообразная творческая деятельность. Все это осуществляется с помощью интерактивных методов обучения. В процессе интерактивного обучения студенты учатся критически мыслить, решать сложные задачи на основе анализа ситуации и актуальной информации, находить альтернативные мнения, принимать взвешенные решения, участвовать в дискуссиях. Для этого занятия организуются по парной и групповой методике, используются исследовательские проекты, ролевые игры.

Результаты анализа теоретических и практических основ развития креативности позволяют выделить принципы структурно-функциональной модели развития креативности будущего учителя в педагогической практике. Эти принципы заключаются в следующем.

1. Принцип задачи.

Использование проблемного принципа не ново для педагогической деятельности. Сущность творчества имеет проблемный характер, она заключается в поиске нестандартного решения проблемы. В педагогической практике развитие творческих способностей будущих учителей в соответствии с принципом проблемности проявляется в творческих проблемных заданиях, например: «Предложить гипотезу и составить план ее проверки...», «Оценка первоначальный результат...», "Представьте учебный материал по-другому..." и так далее.

2. Принцип творческой направленности.

Этот принцип включает в себя развитие не только репродуктивных, но и творческих способностей. Развитие творчества не должно носить только целенаправленный характер, то есть достигаемый результат должен быть далек от представления о том, что результат будет достигнут в конце практики. В этом случае обучающийся должен выполнять задания быстро и без каких-либо эмоций. Поскольку такая ситуация отрицательно влияет на качество обучения, результаты диагностики и в целом всей экспериментальной работы. Если развитие творческих способностей носит ступенчатый характер, Если задание или вид деятельности не рассматривается как следующий этап испытания, а направлен как возможность самопроверки, самопознания и интересной деятельности, то

выполненная работа будет качественной и с показателями успеваемости. изучаемая концепция будет находиться на уровне роста.

4. Принцип честности и последовательности.

Этот принцип требует целостности, последовательности и полноты структуры программы развития креативности. Только в этом случае можно говорить о целесообразности выбора инструментов и методов достижения поставленной цели. Творчество следует рассматривать как составную часть системы качеств, сопровождающих целостный образ будущего учителя.

5. Принцип индивидуализации.

Основным аспектом этого принципа является учет индивидуального стиля учебной работы каждого обучающегося, уникальной траектории его личностного развития и особенностей психических процессов. Тогда индивидуальным результатом каждого участника программы будет творческое достижение, соответствующее уровню сформированности креативности как личностной характеристики.

Основной целью развития творческих способностей является развитие умственной активности и логического мышления учащихся. Для этого нужно пойти еще дальше и установить требования, несколько превышающие способность мыслить ученика.

Также развитие творческих способностей помогает решить следующие задачи:

1. Обучение студентов мыслить в разных направлениях;
2. Обучение нахождению решений проблем в нестандартных ситуациях;
3. Развитие своеобразия мыслительной деятельности.
4. Научить студентов анализировать сложившуюся проблемную ситуацию с разных сторон;
5. Развивать качества мышления, необходимые для более эффективной жизни и адаптации в быстро меняющемся мире.

При этом обязательным условием развития педагогического творчества является реализация принципов гуманитарной психологии во взаимодействии учителя и учащихся.

Эти принципы включают в себя:

1. Высокая оценка идеи каждого ученика, предполагающая положительное подкрепление всех идей и ответов, использование ошибок как возможность взглянуть на знакомое по-новому.
2. Создание среды взаимного доверия и психологической безопасности.
3. Обеспечение независимости в выборе и принятии решений.

Учитель с творческим потенциалом будет обладать следующими качествами:

- Расширяется творческое мышление;
- Имеет хорошие исследовательские навыки;

- Самостоятельно анализирует возможности использования достижений и передового опыта педагогической или специальной науки;
- Активно участвует в реализации творческих проектов и научных исследований, проводимых профессорами и преподавателями.

Современные требования к творчески мыслящему преподавателю заключаются в том, что он должен быть не информатором, а координатором, менеджером, организатором коммуникаций, консультантом с учетом индивидуальных возможностей учащихся. Учитель поддерживает и направляет поиск наиболее эффективных методов получения знаний, поощряет интересные открытия, анализирует неудачные попытки, побуждает учащихся осознавать поражения и победы.

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Каримов Т.Х.
преподаватель
кафедра «Информационные технологии»
Самаркандский институт экономики и сервиса

ПРИМЕНЕНИЕ ИННОВАЦИОННЫХ ОБРАЗОВАТЕЛЬНЫХ ТЕХНОЛОГИЙ НА ПРАКТИКЕ

Аннотация. В развивающихся странах современные педагогические технологии – цифровые технологии обучения демонстрируют взаимное взаимодействие технических средств человеческого фактора для эффективной организации и облегчения обучения, повышения его результата и качества, объективной оценки. Четкое планирование образовательных целей, увеличение видов методов и средств, используемых в процессах обучения и освоения, обогащение эффективности образовательного процесса содержанием – все это новый этап, направленный на совершенствование образовательного процесса, повышение эффективности образования. использовать современные технологии на уроке.

Ключевые слова: Интерактивные методы, инновационное образование, инновация, Педагогическая технология, системный подход, объективная оценка, метод, методология, образование, педагогическая система, гуманизм, теория, умение, компетентность, деятельность, информация.

Karimov T.Kh.
teacher
Department of Information Technologies
Samarkand Institute of Economics and Service

APPLICATION OF INNOVATIVE EDUCATIONAL TECHNOLOGIES IN PRACTICE

Abstract. In developing countries, modern pedagogical technologies - digital learning technologies demonstrate the mutual interaction of technical means of the human factor for the effective organization and facilitation of learning, increasing its results and quality, and objective assessment. Clear planning of educational goals, increasing the types of methods and means used in the processes of learning and development, enriching the effectiveness of the educational process with content - all this is a new stage aimed at improving the educational process and increasing the effectiveness of education. use modern technologies in the classroom.

Key words: Interactive methods, innovative education, innovation, Pedagogical technology, systematic approach, objective assessment, method, methodology, education, pedagogical system, humanism, theory, skill, competence, activity, information.

Сегодня интерес и внимание к использованию интерактивных методов, инновационных технологий, педагогических и информационных технологий в образовательном процессе возрастает с каждым днем, одна из причин этого в том, что до сих пор студент в традиционном образовании - если учащиеся учат только приобретать готовые знания, современные технологии учат их искать приобретаемые знания, самостоятельно изучать и анализировать и даже делать собственные выводы. В этом процессе педагог создает условия для развития, становления, обучения и воспитания личности и одновременно выполняет функции управления и направления. В процессе обучения главной фигурой становится ученик. Поэтому место и роль современных методов обучения – интерактивных методов, инновационных технологий в подготовке квалифицированных специалистов в высших учебных заведениях и на факультетах огромны. Знания, опыт и интерактивные методы педагогической технологии и педагогические навыки обеспечивают образованную, зрелую квалификацию учащихся-студентов.

Сегодня проблема формирования свободной личности требует перевода воспитательной работы в образовательных учреждениях на инновационные педагогические технологии. Процесс этот непрост, поскольку добровольно выстроенная и внедряемая система образования должна быть превращена в научно обоснованную педагогическую систему. В.П. По определению Беспалько, «педагогическая система – это совокупность взаимосвязанных инструментов, необходимых для создания систематического, целенаправленного и заранее обдуманного педагогического воздействия на формирование определенных качеств личности, совокупность методов и процессов».

В каждом обществе определена цель формирования личности, и в соответствии с ней должна существовать педагогическая система. Если цель изменится, существующая система неизбежно изменится. Основной целью «Национальной программы подготовки кадров» Республики Узбекистан является воспитание граждан, чувствующих свою ответственность перед обществом, государством и семьей. Такая Национальная программа считается государственным заказом в сфере образования и полностью соответствует сути национальной идеологии. Только государственный заказ четко определяет общие цели и задачи образования или гарантирует условия существования педагогической системы высшего образования.

Педагогическая технология является такой областью знаний, что в новом тысячелетии произойдет радикальное изменение политики

государства в области образования, возобновится деятельность учителя, у учащихся сформируется система свободомыслия и гуманитарных чувств. На сегодняшний день учителя (педагоги) во многих случаях не могут отличить методику от технологии. Поэтому необходимо уточнить эти понятия. Методика состоит из комплекса рекомендаций по организации и проведению образовательного процесса. Инновационная педагогическая технология представляет собой комплекс мероприятий, обновляющих профессиональную деятельность педагога и гарантирующих конечный результат образования в направлении заранее определенной цели.

Разнообразие тарифов, направленных на уточнение понятия инновационной педагогической технологии, с одной стороны, показывает, что эта тема в той или иной степени решается в развитых странах, а с другой стороны, представляет собой определенный результат попыток внедрения педагогические технологии в педагогическую практику.

В настоящее время в нашей стране имеется достаточно возможностей для объединения научного потенциала специалистов, поскольку единство теории и практики открывает путь к определению истинной сущности педагогической технологии. Поэтому нельзя рассматривать инновационные педагогические технологии как отдельную отрасль педагогики или как систему, направленную только на оптимизацию образовательной практики. Педагогическая технология отражает деятельность в рамках объединения теоретических и практических исследований в этой области.

Теперь цель образования полностью обновляется, соответственно, с обновлением содержания и педагогического процесса границы человеческой деятельности колоссально расширяются, а к аудитории поступают новые технологии (промышленность, электронная информация) с большими образовательными возможностями. Происходящие качественные изменения свидетельствуют о том, что сегодня первичные процессы «Обучения» не укладываются в рамки традиционных методов и средств обучения и уже не совместимы с индивидуальными способностями учителя (педагога). Существуют технические, информационные, полиграфические, аудиовизуальные носители, которые требуют новой методологии и становятся структурными компонентами образовательного процесса и приносят его специфические особенности, превращающие современные педагогические технологии в реальную реальность.

Если посмотреть на историю технологизации образовательного процесса, то этот процесс стал объективной реальностью со второй половины XX века. Информатизация является революционным «поворотом» в этом процессе, то есть образовательная информационная технология представляет собой общение «ученик-ученик-компьютер». Развитие научных, технических и творческих способностей студентов высших учебных заведений является одной из основных задач образования любого типа, ступени и уровня. Действительно, сегодняшняя молодежь

владеет знаниями техники и технологий, основами экономики, но если она не будет обладать навыками их использования, она не сможет достичь своих целей. Знание путей и средств применения полученных знаний на практике позволяет совершенствовать производственные процессы, создавать новое оборудование, орудия труда и новые технологии.

Обширные и прочные знания, умения, компетентность, любознательность, инициативность, стремление к четкой цели при самостоятельном решении задач, требование личной активности являются основой формирования творческих способностей студентов и молодежи.

Важным условием формирования творческих способностей учащихся является активность. Поэтому основная задача педагога – предоставить необходимую информацию, определяющую форму, метод, средства и направления организации этой деятельности. Слишком большая информационная подача не решает задачу положительно. Поэтому целесообразно управлять информационным обеспечением педагогически, учитывая то, что оно обогащено передовыми техническими и технологическими достижениями.

Предметом педагогического управления процессом научно-технического развития и творчества является человеческий фактор, который предполагает изучение уникальной учебной работы и ее управления, методологии и алгоритма решения творческих задач. Системный педагогический подход к процессу организации и подготовки научно-технической творческой деятельности студентов является одним из основных вопросов управления индивидуальным творчеством и творчеством и включает в себя сбор необходимой информации, ее анализ, обработку, определение цели, и разрабатывая план достижения цели, предпринимает такие шаги, как организация творческой работы по плану, контроль за его выполнением, упорядоченное ведение деятельности этой системы, принятие специальных решений.

Любой процесс управления, прежде всего, начинается с постановки цели, то есть умения правильно поставить цель. Он начинается с анализа текущего состояния объекта управления и изучения возможностей его развития. По существу, целенаправленное педагогическое управление научно-техническим творчеством имеет объективное описание, в котором выражаются объективные закономерности развития личности человека. Кроме того, целенаправленное управление является продуктом мышления и формируется в процессе совместной деятельности индивидов. Цель, в свою очередь, определяет направления изменений педагогического объекта, его основные виды и содержание управленческой деятельности.

Целевое педагогическое управление по своему содержанию, временному фактору и условиям подразделяется на несколько групп. Содержание направления условно сгруппировано как экономические, социальные, политические, идеологические и научно-технические цели.

Важной целью подготовки к научно-техническому творчеству является обеспечение человека, участвующего в педагогическом управлении, объективной информацией высокого уровня. Только объективная информация может быть движущей силой целенаправленной деятельности.

Человеческий мозг обладает способностью получать различную информацию на разных уровнях, что требует легкой, свободной и интересной передачи информации. Эффективное использование технических средств в процессе обучения считается дидактической задачей и рассматривается главным образом как активное действие, способ обеспечения принципа обучения.

Необходимость обучения в учебном процессе связана с описанием познавательного процесса, то есть переходом от живого наблюдения к абстрактному мышлению, а затем к практике. Педагоги и психологи утверждают, что мысли не выходят за рамки интуиции и воображения. Также нет прогресса в учебном процессе. Поэтому учебное поведение не ограничивается воздействием на разум, оно выявляет у обучающегося определенный эмоциональный мотив, усвоенные знания закрепляются только на основе единства чувства и логического мышления.

Сегодня, на новом уровне развития образования, обучение невозможно осуществлять без технических средств. Одним из важных показателей инновационных педагогических технологий является скорость передачи информации обучающимся, обеспечиваемая этими инструментами. Таким образом, развитие науки и научно-техническое развитие требуют друг друга, а информационное обеспечение процесса творческой деятельности включает направления управления на определенном уровне. Однако обогащение учебных занятий образовательными методами не должно разрушать образовательную систему и логику. Инновационные педагогические технологии создают определенные возможности для сбора информации и использования ее в процессе обучения, что позволяет формировать творческие способности у студента. Эти данные определяют возможности управления содержанием информационного обеспечения основ науки и методов творчества. Эффективность процесса подготовки студента к творческой деятельности во многом требует наличия у него информационного обеспечения, а также системности и непрерывности направлений педагогического управления.

Опыт просвещенного и культурного светского образования показывает, что среда, к которой он принадлежит, и сложившиеся в ней общественные отношения имеют большое значение в формировании интеллектуального потенциала человека, мировоззрения, а также его духовно-нравственного образа. Ведь в среде, к которой принадлежит человек, существуют объективные и субъективные факторы, необходимые для формирования его мышления, духовно-нравственного образа. Высшие

и средние специальные учебные заведения занимают особое место в среде, в которой действует человек.

Реформы в сфере непрерывного образования в Республике Узбекистан позволяют обеспечить экономику страны квалифицированными специалистами. Подчеркнув актуальность данного вопроса, Первый Президент Республики Узбекистан И.А.Каримов заявил, что «В Узбекистане имеются все необходимые условия для перехода к современной модели инновационного развития». Эта модель основана на широком и эффективном использовании созданного научно-технического потенциала, достижений фундаментальной и прикладной науки, широком внедрении в практику технологий, требующих глубоких знаний, увеличении численности высококвалифицированных и талантливых научных кадров. Это необходимое условие и прочная основа для вхождения нашей страны в мировую экономику и промышленно развитые страны.

Рост экономической мощи нашей страны в условиях рыночной экономики привел к коренным реформам в системе образования, которая является центральным звеном социальной сферы нашего общества. Принимаются новые законы и документы, создаются современные педагогические технологии в целях улучшения образования учащихся и студентов, расширения, углубления и обогащения содержания предоставляемого им образования, а также обеспечения непрерывности образования.

Инновационная педагогическая технология предусматривает целенаправленную организацию и реализацию познавательной деятельности студентов по основам естественных наук.

В процессе обучения, основанного на новом подходе, новом мышлении, необходимо внедрять эффективные формы и методы учебной деятельности учащихся, эффективно организовывать их самостоятельную работу. Научно и методически совершенная организация учебного процесса – залог успеха. Всевозможные упражнения и самостоятельные задания учат учащихся мыслить, творчески работать, комплексно мыслить, решать задания, исходя из своего жизненного опыта. Как обнаружил известный английский писатель Дж. Бернارد Шоу, «Единственный путь к познанию – это действие». Независимо от организации такой деятельности в форме работы учащихся и преподавателей (традиционные или нетрадиционные уроки, внеклассная работа, лекции или практические занятия), она может дать высокий педагогический эффект только тогда, когда осуществляется в полной мере с научно-теоретической точки зрения. с научно-методической и воспитательно-духовной точки зрения. При этом, конечно же, предусматриваются тренинги, организованные с учетом возрастных и физиологических особенностей, интересов, уровня знаний и кругозора обучающихся. Для этого необходимы отличные педагогические навыки и профессиональный потенциал педагога.

Педагогическое изменение во фразе «Нет плохой земли, а есть необразованные земледельцы, которые не знают, как получить с нее урожай» известного почвовед Р. Вильямиса, который первым рекомендовал траву -полевая ротация к земледельческой культуре в мировой практике. скажем так: «Не бывает плохого ученика (учащегося), а есть только плохие учителя (педагоги, воспитатели), которые не могут указать ему правильный путь обучения».

Три характеристики: глубокие знания, профессиональная методология и простые человеческие качества в совокупности определяют результат учебного процесса. Как невозможно поверить, что человек без знаний может иметь методические навыки, так какой смысл учить человека, не знающего человечества, имеющего и то и другое? Педагогические технологии и педагогическое мастерство также погружаются в трясину схоластики без завершения вышеупомянутых трех.

Поскольку качество и эффективность образования зависит от многих факторов, невозможно дать единую и убедительную рекомендацию или руководство по этому поводу. Не следует забывать, что существуют конкретные и подходящие критерии возможности использования инновационных педагогических или информационно-коммуникационных технологий. Даже те, кто поднимает знамя нестандартности, новаторства или интерактивности, не должны отрицать тысячелетние (а может, и миллионные) традиции и опыт преподавания, огромный накопленный запас опыта. Не следует забывать о принципах взаимодействия старого и нового, баланса между базой и надстройкой, совместимости традиции и инициативы.

Работа учителя (педагога) должна оцениваться только исходя из качества знаний, умений и квалификации подведомственных ему лиц. Да, было бы справедливо оценивать по качеству знаний (не по уровню знаний, не по присвоенным рейтинговым баллам, не по индексу мастерства).

Использование информационно-коммуникационных технологий в сочетании с современными педагогическими технологиями в высших учебных заведениях служит повышению качества профессиональной подготовки будущих специалистов, эффективность учебных занятий и полезный труд преподавателей (педагогов) повышает коэффициент. Иными словами, системный подход к образовательному процессу и сервис, состоящий из различных педагогических мероприятий, сегодня считаются важным условием повышения эффективности обучения в системе непрерывного образования. В то же время современные педагогические технологии демонстрируют взаимное взаимодействие человеческого потенциала и технических средств, необходимых для облегчения форм обучения, основанных на системных подходах, гарантирующих его результат и объективную оценку. Уточнение образовательных целей, диверсификация методов, способов и средств, используемых в процессах

преподавания и обучения, углубление содержания образовательных процессов – все это означает совершенствование деятельности образовательных учреждений.

Однако говорят, что нет предела усовершенствованию, то есть нет конца. Поэтому и педагогические технологии, и педагогическое мастерство являются понятиями безграничными. Чем больше его ищешь и чем больше инициативы, тем меньше оно кажется. Это самая простая и основная истина преподавания. Подобная деятельность учителей (педагогов) в конечном итоге приведет к выполнению высокого социального заказа.

Уровень грамотности членов общества является важным фактором, определяющим культурный и образовательный имидж общества. Чтобы сделать большинство людей грамотными, необходима технологизация чтения и преподавания, науки, исследований и обучения, короче говоря, процессов образования и обучения, широкое применение современных методов и методов обучения, их и путем их применения, необходимо давать качественные и эффективные знания получателям образовательных знаний. Новый подход к системе непрерывного образования, ее семи видам образования, особенно трем видам образования, принятым в ДТС - общему среднему образованию, среднему специальному образованию, профессиональному образованию и высшему образованию, для внедрения эффективных форм и методов образовательной деятельности обучающихся. в процессе обучения на основе нового мышления эффективно организовывать свою самостоятельную работу, эффективно использовать образовательные технологии, обучать связности и преемственности между их структурными компонентами, обеспечение которых является требованием времени. Научно и методически совершенная организация учебного процесса является залогом успеха в этой области. Всевозможные упражнения и самостоятельные задания учат учащихся мыслить, творчески работать, комплексно мыслить, решать задания, исходя из своего жизненного опыта.

Классная и внеклассная деятельность, являющаяся основной организационной формой обучения, независимо от того, как она организована (традиционные или нетрадиционные занятия, внеклассная и воспитательная деятельность, лекции или практические занятия). Ввиду этого она может дать высокий педагогический эффект только тогда, когда он полностью реализован с точки зрения научной теории, научного метода и воспитательно-духовного аспекта. При этом, конечно, с учетом возрастных и физиологических особенностей, интересов, уровня знаний и кругозора учащихся планируется деятельность. Для этого необходимы отличные педагогические навыки и профессиональный потенциал педагога. 3 характеристики крепких знаний, профессиональной методологии и простых человеческих качеств в совокупности определяют результат учебного процесса. Как невозможно поверить, что человек без знаний

может иметь методические навыки, так какой смысл учить человека, не знающего человечества, имеющего и то и другое? Педагогические технологии и педагогическое мастерство также погружаются в трясину схоластики без завершения трех упомянутых выше.

Поскольку качество и эффективность образования зависит от многих факторов, невозможно дать единую и убедительную рекомендацию или руководство по этому поводу. Не следует забывать, что существуют конкретные и подходящие критерии возможности использования инновационных педагогических или информационно-коммуникационных технологий. Даже те, кто поднимает знамя нестандартности, новаторства или интерактивности, не должны отрицать тысячелетние (а может, и миллионные) традиции и опыт преподавания, огромный накопленный запас опыта. Не следует забывать о принципах взаимосвязи старого и нового, соразмерности базы и надстройки, совместимости традиции и инициативы. Труд учителя (педагога) должен оцениваться только по качеству знаний и умений подведомственных ему лиц.

Да, было бы справедливо оценивать по качеству знаний (не по уровню знаний, не по присвоенным рейтинговым баллам, не по уровню освоения), иными словами, эффективность преподавания в системе непрерывного образования сегодня является важным условием. к совершенствованию относится системный подход к образовательному процессу и оказанию услуг, состоящий из различных педагогических мероприятий. Это самая простая и основная истина преподавания. Только этот вид деятельности учителей (педагогов) в конечном итоге приводит к выполнению высокого социального заказа. Поэтому три социальные функции образования - образование, воспитание и развитие личности, конечно, также выполняются.

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Кенжаева К.А.
**Национальный исследовательский университет «Ташкентский
институт ирригации и механизации сельского хозяйства»**

ВОПРОСЫ ОБУЧЕНИЯ ПРОФЕССИОНАЛЬНОЙ ТЕРМИНОЛОГИИ

Аннотация. Данная статья посвящена вопросам обучения профессиональной лексики в современном мире. В ней рассматривается важность владения специализированной терминологией для эффективной коммуникации и развития успешной карьеры. Описываются основные методы обучения профессиональной лексики, такие как интенсивное чтение материалов по специализированным темам, применение специальных словарей и участие в профессиональных дискуссиях. В статье подчеркивается значимость систематизации и изучения ключевых терминов для конкретной отрасли, а также необходимость постоянного обновления и расширения профессионального словарного запаса для успешного развития карьеры специалистов.

Ключевые слова: профессиональная лексика, обучение, проблемы, терминология, перевод, контекст, индивидуальные потребности, учебные материалы, эффективность, персонализированный подход, коммуникация, мотивация, карьерный рост, контекстуальные примеры, учебные задания.

Kenzhaeva K.A.
National Research University
"Tashkent Institute of Irrigation and Agricultural Mechanization"

ISSUES IN TRAINING PROFESSIONAL TERMINOLOGY

Annotation. This article addresses the issues surrounding the teaching of professional vocabulary in contemporary settings. It explores the significance of mastering specialized terminology for effective communication and career advancement. The main methods for teaching professional vocabulary, such as intensive reading of specialized materials, utilizing specialized dictionaries, and engaging in professional discussions, are discussed. The article emphasizes the importance of organizing and learning key terms specific to a particular field, as well as the necessity of continuously updating and expanding one's professional vocabulary for the successful career development of professionals.

Key words: professional vocabulary, training, problems, terminology, translation, context, individual needs, educational materials, effectiveness, personalized approach, communication, motivation, career growth, contextual examples, educational tasks.

Введение: Профессиональная лексика играет ключевую роль в успешной коммуникации в рабочей среде и является неотъемлемой частью развития карьеры специалиста. Овладение специализированной терминологией не только облегчает понимание профессиональных концепций, но и способствует эффективной работе в выбранной области деятельности. Однако обучение профессиональной лексике может столкнуться с различными проблемами, начиная от отсутствия качественных учебных материалов до недостатка персонализированного подхода к потребностям студентов.

В данной статье будут рассмотрены основные проблемы, с которыми сталкиваются как преподаватели, так и студенты при изучении профессиональной лексики, а также предложены пути их решения. Мы рассмотрим вопросы неоднозначности перевода специализированных терминов, отсутствия контекстуального включения в учебный процесс, недостаточного внимания к индивидуальным потребностям студентов и другие аспекты, влияющие на эффективность обучения профессиональной лексике. Понимание и разрешение данных проблем являются важными шагами в повышении качества обучения и успешном овладении студентами необходимыми знаниями и навыками для профессионального роста.

Существуют четыре основные проблемы обучения профессиональной терминологии:

1. Отсутствие специализированных учебных материалов: Недостаточное количество качественных учебных пособий и образовательных ресурсов, охватывающих разнообразные профессиональные темы и терминологию, создает проблему в доступе к необходимым материалам для обучения профессиональной лексике.

2. Неоднозначность перевода специализированных терминов: Перевод специфических профессиональных терминов на другие языки может быть проблематичным из-за различий в терминологии между разными языками, что затрудняет эффективное обучение и использование профессиональной лексики.

3. Отсутствие контекстуального включения в учебный процесс: Недостаток практических заданий и контекстуальных примеров использования профессиональной лексики в учебных программах может затруднять успешное освоение этого материала студентами.

4. Недостаточное внимание к индивидуальным потребностям студентов: Не учитывание специфических потребностей и интересов студентов при обучении профессиональной лексике может привести к недостаточной мотивации и затруднениям в усвоении новой терминологии, что усложняет процесс обучения.

Проблема №1: Неоднозначность перевода специализированных терминов.

Одной из основных проблем в обучении профессиональной лексике является неоднозначность перевода специализированных терминов. Многие профессиональные термины имеют узкую специализацию и не всегда имеют однозначный эквивалент в другом языке. При переводе таких терминов возникают сложности, связанные с выбором наиболее подходящего эквивалента, который передаст точный смысл и контекст использования исходного термина.

Неоднозначность перевода специализированных терминов может привести к неправильному пониманию и неверному использованию терминологии студентами. Это создает путаницу и затрудняет коммуникацию в профессиональной сфере, что может повлечь за собой ошибки в работе и непонимание ключевых концепций. Для решения данной проблемы необходимо проводить тщательный анализ профессиональной лексики, сопоставлять различные варианты перевода и объяснять студентам контекстуальное значение каждого термина. Важно также использовать примеры из реальной профессиональной практики для иллюстрации использования специализированных терминов и помочь студентам уяснить их значения в контексте конкретной отрасли или сферы деятельности.

Проблема №2: Неоднозначность перевода специализированных терминов.

Перевод специализированных терминов на другие языки представляет значительные трудности из-за разнообразия вариантов передачи смыслов и нюансов. Особенно это актуально в контексте профессиональной лексики, где точность и однозначность понимания терминов являются ключевыми. Отличия в терминологии между языками могут привести к переводам, не передающим полный смысл или контекст специализированных терминов. Проблема возникает из-за того, что некоторые профессиональные понятия и термины могут быть уникальными для определенной области знаний и не иметь прямого эквивалента в другом языке. Это создает сложности не только при обучении и понимании профессиональной лексики, но и при переводе качественного учебного материала для студентов, изучающих иностранный язык.

Часто возникает необходимость в разъяснении и толковании специализированных терминов для устранения неоднозначностей и ошибок в их переводе. Это требует от преподавателей и переводчиков глубокого понимания специфики использования профессиональной лексики в разных контекстах и обеспечивает необходимость постоянного совершенствования и расширения словарного запаса студентов, чтобы они могли успешно овладеть профессиональной терминологией и применять ее на практике.

Проблема №3: Отсутствие контекстуального включения в учебный процесс.

Отсутствие контекстуального включения в учебный процесс при обучении профессиональной лексике может осложнять усвоение и

понимание новых терминов студентами. Контекст играет ключевую роль в помощи учащимся увидеть реальные ситуации, в которых используется профессиональная лексика, что способствует более эффективному усвоению и применению терминов. Без соответствующих контекстуальных примеров и заданий студентам может быть сложно увидеть связь между изучаемыми словами и их конкретным использованием в профессиональной сфере. Это приводит к поверхностному пониманию лексики и затрудняет студентам применять новые термины на практике.

Для решения этой проблемы необходимо включать учебные материалы с реальными текстами, ситуациями из профессиональной жизни и кейсами, которые демонстрируют использование профессиональной лексики в реальном контексте. Такой подход поможет студентам лучше усваивать терминологию и понимать, как эти слова взаимодействуют в специфических областях знаний. Кроме того, активное использование новых терминов в различных контекстах и практических заданиях способствует более глубокому усвоению профессиональной лексики студентами.

Проблема №4: Недостаточное внимание к индивидуальным потребностям студентов.

Недостаточное внимание к индивидуальным потребностям студентов при обучении профессиональной лексике может привести к снижению эффективности образовательного процесса. Каждый студент имеет свой уровень знаний, интересы и специфические потребности по изучению профессиональной терминологии, и их учет играет важную роль в успешном освоении материала.

Заключение:

Обучение профессиональной лексике представляет собой важный аспект формирования языковых навыков и профессиональной компетенции. В ходе изучения данной темы возникают разнообразные проблемы, такие как неоднозначность перевода специализированных терминов, отсутствие контекстуального включения в учебный процесс, и недостаточное внимание к индивидуальным потребностям студентов.

Для эффективного преодоления данных проблем необходимо активно внедрять контекстуальные задания и материалы в учебный процесс, обеспечивать персонализированный подход к потребностям студентов, а также создавать условия для более глубокого и осмысленного усвоения профессиональной лексики. Преподаватели и обучающиеся должны сотрудничать и стремиться к обогащению словарного запаса, что позволит успешно преодолевать трудности, связанные с обучением профессиональной терминологии. Постоянное совершенствование методик обучения, учет специфики отраслей знаний и индивидуальных особенностей студентов являются ключевыми факторами для эффективного овладения профессиональной лексикой. Повышение качества образования

в этой области способствует успешной карьере выпускников и обеспечивает им необходимые инструменты для продвижения в выбранной профессиональной сфере.

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*Киселева Т.А.
учитель математики и информатики
МБОУ СОШ №8 им. И.В.Панфилова
МО Кавказский район
Плужникова Е.А., к.п.н.
доцент
кафедра ТИПИОП
ФГБОУ ВО «Армавирский
государственный педагогический университет»*

**ФОРМИРОВАНИЕ ПРОФЕССИОНАЛЬНОЙ КОМПЕТЕНЦИИ
УЧИТЕЛЯ МАТЕМАТИКИ В ИНФОРМАЦИОННО-
ОБРАЗОВАТЕЛЬНОЙ СРЕДЕ**

Аннотация. В статье мы обсуждаем вопрос о развитии профессиональной компетентности, как динамичном процессе усвоения и модернизации профессионального опыта, ведущий к развитию индивидуальных профессиональных качеств, накоплению профессионального опыта, предполагающий непрерывное развитие и самосовершенствование

Ключевые слова: профессиональная компетентность учителя, профессиональные и личностные качества, рационализация, информационные и коммуникационные технологии (ИКТ). межпредметные связи.

*Kiseleva T.A.
Teacher of mathematics and computer science
Municipal budgetary educational institution
Secondary School No. 8 named after I.V. Panfilov
Municipal district Kavkazsky district
Pluzhnikova E.A., Ph.D.
associate professor
Department of TIPIOP
FSBEI HE "Armavir State Pedagogical University"*

**FORMATION OF PROFESSIONAL COMPETENCE OF
MATHEMATICS TEACHERS IN THE INFORMATION AND
EDUCATION ENVIRONMENT**

Abstract. In the article we discuss the issue of developing professional competence as a dynamic process of assimilation and modernization of professional experience, leading to the development of individual professional

qualities, accumulation of professional experience, implying continuous development and self-improvement

Key words: professional competence of a teacher, professional and personal qualities, rationalization, information and communication technologies (ICT). interdisciplinary connections.

Одной из главных в деле информатизации общества является роль информатизации образования - процесса, направленного на повышение качества содержания образования, а также внедрение и развитие новых информационных технологий во всех видах деятельности в национальной системе образования России (Концепция информатизации сферы образования)

Целью информатизации образования является рационализация интеллектуальной деятельности за счет использования информационных и коммуникационных технологий (ИКТ).

Важное значение приобретают не только прочные фундаментальные знания педагога, но и его способность оперативно реагировать на запросы динамично меняющейся действительности, постоянно пополняя свой интеллектуальный багаж новой информацией, непрерывно занимаясь самообразованием и максимально эффективно используя источники информации для решения образовательных проблем.

Сегодня невозможно представить себе процесс обучения без использования информационно-коммуникационных технологий (далее – ИКТ). ИКТ используются как непосредственно на занятиях, так и при подготовке к ним.

Дидактические возможности средств ИКТ, реализация которых создает предпосылки интенсификации образовательного процесса, а также создания методик, ориентированных на развитие интеллекта обучаемого, на самостоятельное извлечение и представление знания:

1. незамедлительная обратная связь между пользователем и средствами ИКТ, определяющая реализацию интерактивного диалога, который характерен тем, что каждый запрос пользователя вызывает ответное действие системы и, наоборот, реплика последней требует реакции пользователя;

2. визуализация учебной информации об изучаемом объекте, процессе (наглядное представление на экране: объекта, его составных частей или их моделей; процесса или его модели, в том числе скрытого в реальном мире; графической интерпретации исследуемой закономерности, изучаемого процесса);

3. моделирование и интерпретация информации об изучаемых или исследуемых объектах, их отношений, процессов, явлений как реальных, так и виртуальных (представление на экране математической, информационно-описательной, наглядной модели адекватно оригиналу);

4. архивирование, хранение больших объемов информации с возможностью лёгкого доступа к ней, ее передачи, тиражирования;

5. автоматизация процессов вычислительной, информационно-поисковой деятельности, а также обработки результатов учебного эксперимента с возможностью многократного повторения фрагмента или самого эксперимента;

6. автоматизация процессов информационно-методического обеспечения, организационного управления учебной деятельностью и контроля за результатами усвоения, которая включает в себя автоматизацию информационной деятельности и информационного взаимодействия между участниками образовательного процесса с помощью локальных и глобальной компьютерных сетей.

Повышение эффективности и качества образовательного процесса может быть обеспечено за счёт реализации уникальных, с точки зрения педагогики, возможностей средств ИКТ, которые были перечислены выше. При этом развиваются побудительные мотивы (стимулы) к получению образования, обуславливающие активизацию познавательной деятельности с использованием средств ИКТ, углубляются межпредметные связи за счёт использования современных средств обработки информации, в том числе и аудиовизуальной. Одной из главных задач по формированию предметно-педагогической ИКТ-компетентности учителя математики является задача развития навыков использования ИКТ при решении математических задач.

Новые образовательные стандарты предъявляют новые требования к интеллектуальному развитию учащихся, в частности посредством изучения математики. Одним из вариантов эффективного решения этой задачи является использование современных ИКТ. Интернет–викторины, олимпиады, конкурсы становятся популярными и востребованными формами работы учащихся, а участие в них способствует формированию и развитию умственных способностей, в частности критического мышления учащихся.

Под профессиональной компетентностью учителя понимается совокупность профессиональных и личностных качеств, необходимых для успешной педагогической деятельности. Профессионально компетентным можно назвать учителя, который на достаточно высоком уровне осуществляет педагогическую деятельность, педагогическое общение, достигает стабильно высоких результатов в обучении и воспитании учащихся.

Развитие профессиональной компетентности – это развитие творческой индивидуальности, формирование восприимчивости к педагогическим инновациям, способностей адаптироваться в меняющейся педагогической среде

Исходя из современных требований, можно определить основные пути развития профессиональной компетентности педагога:

- Работа в методических объединениях, творческих группах;
- Исследовательская, экспериментальная деятельность;
- Инновационная деятельность, освоение новых педагогических технологий;
- Различные формы педагогической поддержки;
- Активное участие в педагогических конкурсах, мастер-классах, форумах и фестивалях;
- Обобщение собственного педагогического опыта;
- Использование ИКТ.

Развитие профессиональной компетентности – это динамичный процесс усвоения и модернизации профессионального опыта, ведущий к развитию индивидуальных профессиональных качеств, накоплению профессионального опыта, предполагающий непрерывное развитие и самосовершенствование.

Говоря о профессиональной компетентности учителя нельзя не сказать о создании портфолио учителя. Портфолио есть отражение профессиональной деятельности, в процессе формирования которого происходит самооценивание и осознается необходимость саморазвития. С помощью портфолио решается проблема аттестации педагога, т.к. здесь собираются и обобщаются результаты профессиональной деятельности. Создание портфолио – хорошая мотивационная основа деятельности педагога и развития его профессиональной компетентности.

Для успешной работы на уроке компетентный учитель должен придерживаться требований к содержанию и методике проведения урока.

- Требования к содержанию урока.
 - Научность.
 - Воспитывающий и развивающий характер каждого урока.
 - Осуществление связи с жизнью, теории с практикой.
 - Содержание коллективных форм работы учащихся с групповыми и индивидуальными.
 - Организация активной познавательной деятельности учащихся.
 - Сочетание изложения материала учителем с самостоятельной работой учащихся по приобретению новых знаний и умений применять их на практике.
 - Оперативный контроль со стороны учителя за деятельностью класса в целом и отдельных учащихся.
- Требования к методике проведения урока.
- Применяемые на уроке методы и приемы обучения должны способствовать тому, чтобы урок был эмоциональным, вызывал интерес к учению, воспитывал потребность в знаниях
 - Темп и ритм урока должны быть оптимальными, действия учителя и учеников завершенными.

- Необходимы полный контакт по взаимодействию учителя и учащихся на уроке, педагогический такт.

- Необходимо создание атмосферы доброжелательности и активного творческого труда.

- Чередовать по возможности виды деятельности учащихся, сочетать разнообразные методы и приемы обучения.

- Большую часть урока учащиеся должны активно работать над овладением знаниями и умениями.

- Всем учебным процессом на уроке управляет учитель.

Таким образом, компетентность учителя — это синтез профессионализма (специальная, методическая, психолого-педагогическая подготовка), творчества (творчество отношений, самого процесса обучения, оптимальное использование средств, приемов, методов обучения) и искусства (актерство и ораторство).

Большой опыт работы в профильных классах и обладая профессиональной компетентностью, позволяет мне успешно проводить факультативные, активные и обычные уроки по темам из углубленного курса, что хорошо помогает учащимся на экзаменах.

Таким образом, организация учебных занятий по математике на основе информационных технологий либо с использованием их элементов, создание или использование (доработка) завершённого проекта тестовой обучающей программы по математике, создание набора презентаций для использования на занятиях – вот неполный перечень функций учителя математики, для выполнения которого необходимо обладать предметно-педагогической ИКТ-компетентностью.

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Ковалева Н.С.
учитель изобразительного искусства и технологии
МБОУ СОШ №8 им.И.В.Панфилова
МО Кавказский район
Терсакова А.А., к.п.н.
доцент
кафедра ТИПИОП
ФГБОУ ВО «Армавирский
государственный педагогический университет»

РАЗВИТИЕ ТВОРЧЕСКИХ СПОСОБНОСТЕЙ ДЕТЕЙ С ОВЗ

Аннотация. В статье мы рассматриваем условия для формирования творческих способностей для детей с ОВЗ.

Ключевые слова: инклюзия, особый ребенок, развитие творческих способностей детей с ОВЗ, формирование творческой личности, дети с особенностями, создание условий, социализация, структура занятий #понятие творчество, способность к творчеству у детей с ОВЗ, трудности у детей с ОВЗ, выводы по развитию творческих способностей детей с ОВЗ.

Kovaleva N.S.
Fine Arts and Technology Teacher
Municipal budgetary educational institution Secondary School No. 8 named
after I.V. Panfilov
Municipal district Kavkazsky district
Tersakova A.A., Ph.D.
associate professor
Department of TIPIOP
FSBEI HE "Armavir State Pedagogical University"

DEVELOPMENT OF CREATIVE ABILITIES OF CHILDREN WITH DISABILITIES

Abstract. In the article we consider the conditions for the formation of creative abilities for children with disabilities.

Key words: inclusion, special child, development of creative abilities of children with disabilities, formation of a creative personality, children with special needs, creation of conditions, socialization, structure of classes #concept of creativity, ability to create in children with disabilities, difficulties in children with disabilities, conclusions on development of creative abilities of children with disabilities.

Одной из важных тенденций государственной политики в области образования является особая забота и внимание к детям с ограниченными возможностями здоровья. Обозначена необходимость создания условий «для получения без дискриминации качественного образования лицами с ограниченными возможностями здоровья».

Не так давно вошли в педагогический обиход такие понятия, как «особый» ребёнок, «ребёнок с ограниченными возможностями» и даже – «особенная семья». Современный подход в вопросе оказания помощи и поддержки детям с ОВЗ ориентирован на включение их в среду обычных сверстников, что отражает собой реализацию прав детей на получение образования.

Развитие творческих способностей, для детей с ОВЗ имеют важное значение, так как способствуют раскрытию личного потенциала, реализации себя, участие в творчестве и созидании, приобретение опыта успешности в какой-либо области за счет своих способностей и трудолюбия. Ребёнок с ОВЗ, участвуя в творческой деятельности, может пройти путь от интереса, через приобретение конкретных навыков, к профессиональному самоопределению, что так же важно для успешной социализации. Развивая творческие способности у детей с ОВЗ, мы, педагоги, создаем условия для успешной адаптации в социум

В основе взаимодействия с ребенком в учебной деятельности лежит принцип успешности каждого обучающегося, что требует особых педагогических средств и способов. Методической основой организации этой деятельности являются дополнительные общеобразовательные общеразвивающие программы по приоритетным направлениям работы учреждения, отвечающие социальному заказу родителей и общества на развитие творческой и активной личности.

Творческая деятельность, оказывает большое значение в жизни человека, тем более она оказывает большое значение в жизни детей с ограниченными возможностями здоровья. В процессе творческой деятельности у ребенка с потребностями усиливается ощущение собственной личностной ценности, активно строятся индивидуальные социальные контакты, возникает чувство внутреннего контроля и порядка. Кроме этого, творчество помогает справиться с внутренними трудностями, негативными переживаниями, которые кажутся непреодолимыми для ребенка. Свои чувства и эмоции, а также знание и отношение ребенку легче выразить с помощью зрительных образов, чем вербально, следует отметить, что некоторые дети ограничены или вообще лишены возможности говорить или слышать, тогда невербальное средство оказывается единственным инструментом, вскрывающим и проясняющим интенсивные чувства и убеждения. Необходимо учитывать также тот факт, что средства творчества предоставляют ребенку возможность для выражения чувств, в свойственной ему манере, понижая их активность. Если ребенок

робок и боязлив, не уверен в своих силах, для него очень полезно творчество. Творческая деятельность, позволяет ребенку выйти из состояния зажатости. Дети с особенностями развития имеют множество ограничений в различных видах деятельности. Они не самостоятельны и нуждаются в постоянном сопровождении взрослого. Они лишены широких контактов, возможности получать опыт от других сверстников, которые есть у обычного ребенка. Их мотивация к различным видам деятельности и возможности приобретения навыков сильно ограничены. Трудности в освоении окружающего мира приводят к возникновению эмоциональных проблем у таких детей (страх, тревожность и т. д.). Часто мир для них кажется пугающим и опасным. Невозможность выразить свои переживания, например, в игре, как это происходит у обычных детей, приводит к возрастанию эмоционального напряжения, как следствие, к возникновению проблем в поведении. Это становится серьезным препятствием в развитии ребенка. Также нужно отметить, что познавательная активность ребенка зависит от уровня активности, а у ребенка с особенностями развития собственная активность снижена.

Для развития творческих способностей детей с ОВЗ используются нетрадиционные техники: тестопластика, экспериментирование различных художественных материалов, работы из природного материала (семян, крупы, опилок, стружки, скорлупы и т.д.), дидактические игры, плетение бисером, бумаговырезание(вытынанка). Творческая работа с разными художественными материалами и техникой стимулирует интерес детей к прикладному творчеству и являются необходимым условием формирования творческой личности ребенка. На занятиях идет обобщение накопленного детьми умения пользоваться разными художественными материалами, и перевод их представления о художественных материалах на более высокий уровень. На каждой новой ступени познания дети возвращаются уже к знакомой технике работы там, где это возможно (метод «забегания вперед» и «возвращения к пройденному»). Если художественно-творческая деятельность детей на индивидуальных занятиях протекает на эмоционально-чувственной основе, то, на групповые занятия выстраиваются на познавательно-аналитическом уровне, обязательно с сохранением в ней эмоционально-образного, творческого начала.

Работа по развитию творческих способностей у детей с ограниченными возможностями здоровья трудна, но богата развивающими идеями. И это важно не только для обучающихся, но и для педагога. Нужно постоянно помнить, что каждый ребенок должен иметь возможность получить такое образование, которое позволит ему достичь максимально возможного для него уровня развития. Все дети рождаются со своими природными задатками, талантами и возможностями. Перед нами, педагогами, стоит задача - раскрыть природные способности ребенка, помочь ребенку познать мир своим путем.

Положительные результаты, достигнутые в ходе работы с детьми, убеждают в том, что начатая деятельность востребована, необходима и значима для интеллектуального и творческого развития личности, и требует своего продолжения на следующих ступенях образования.

Таким образом, поддержать и развить индивидуальность ребенка, не растерять, не затормозить рост его способностей – это особо важная задача обучения таких детей.

На каждом занятии стараюсь увеличивать социальную активность детей, развивать доверие к педагогу, создаю ситуации успеха, или даю учащимся такие задания, решение которых требует от ребёнка проявления самостоятельности. Через такое познание окружающего мира и взаимодействие со взрослыми и происходит получение ребёнком первого положительного опыта социализации.

Поскольку работа требует большой концентрации внимания и усидчивости, во время занятий необходимо все время поддерживать интерес детей. С этой целью, во-первых, предоставляю детям возможность выбора, во-вторых, работу разделяю на несколько этапов, которые энергично будут сменять друг друга с проведением физминуток и пальчиковой гимнастики. Для релаксации и создания ребенком выразительного художественного образа использую музыкальное сопровождение, которое сопутствует созданию атмосферы творчества, взаимного сопереживания. Обязательно использую различные способы восхищения любыми успехами детей.

В рамках общего школьного образования детям с ОВЗ предоставлены «скудные» возможности развития творческих способностей, а дополнительное образование создает специальные условия, комфортная «домашняя» обстановка, которая помогает раскрыть у обучающихся природные дарования. Удовлетворение от общения со сверстниками располагает к доверительным отношениям. Положительный эмоциональный фон способствует плодотворному обучению и воспитанию детей с ОВЗ.

Успешное освоение творческой деятельности способствует интеллектуальному развитию ребенка, помогает в формировании других видов деятельности. Поэтому огромное коррекционное значение в жизни детей с нарушениями имеют занятия прикладной, творческой направленности. Известно, что процесс изображения предметов и явлений окружающего мира сложен по своей природе и связан с развитием личности ребенка, с формированием его чувств и сознания. В процессе усвоения детьми ряда навыков происходит совершенствование тонкой моторики рук. Как сказал В.А.Сухомлинский: «Истоки творческих способностей и дарований детей на кончиках их пальцев. От пальцев, образно говоря, идут тончайшие ручейки, которые питают источник творческой мысли. Другими словами, чем больше мастерства в детской ладошке, тем умнее ребенок».

Итак, развитие творческих способностей, для детей с ОВЗ, имеет важное значение, так как способствует раскрытию личного потенциала, реализации себя, участие в творчестве и созидании, приобретение опыта успешности в конкретной области за счет своих способностей и трудолюбия. Ребёнок с ОВЗ, участвуя в творческой деятельности, может пройти путь от интереса, через приобретение конкретных навыков, к профессиональному самоопределению, что так же важно для успешной социализации. Развивая творческие способности у детей с ОВЗ, создаем условия для успешной адаптации в социум, равные возможности для дальнейшего существования в нем.

Для развития творческих способностей используются нетрадиционные техники(тестопластика; витраж, коллаж с применением стружки, крупы, семян, пуговиц, скорлупы; декупаж, папье-маше, комбинированная аппликация – применение войлока, ткани, кружева, тесьмы, пряжи и т.д).Перечисленные техники привлекательны своеобразной художественной выразительностью, содержат элементы новизны, активизируют индивидуальные способности детей, дают неограниченные возможности для импровизации сочетания самых разных материалов. Их можно и нужно расширять, и совершенствовать с учетом возраста и интересов учащихся, а также с учетом индивидуального подхода к развитию творческих способностей каждого ребенка.

Как показывает опыт, использование нетрадиционной техники выводит ребенка за привычные рамки прикладного творчества, пробуждает в них интерес к самостоятельному творчеству, к эксперименту, раскрепощает, помогает детям избавиться от комплекса «я не умею», «у меня не получается», «я не сделаю правильно». Они начинают работать смелее, увереннее, независимо от степени их способностей. Доступность использования нетрадиционных техник определяется возрастными особенностями детей. «Не навязывать ничего такого, что не соответствует возрасту и методу обучения ...учитывать при обучении возрастные особенности детей ...двигаться вперед, не спеша...от простого к сложному» (Я.А.Коменский)

Мы, педагоги, не имеем возможность помочь детям с ОВЗ решить проблемы со здоровьем, но в наших силах помочь им решить вторую проблему – расширить круг их общения, научить их реализовать себя, не дать им замкнуться в себе, показать детям широту внешнего мира.

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*Кодиров Б.Х.
соискатель
старший преподаватель
кафедра «Производства строительных
материалов, изделий и конструкции»
Ферганский политехнический институт
Республика Узбекистан, г. Фергана*

**ИЗУЧЕНИЕ ПРОЦЕССА ПОЛУЧЕНИЯ АММИАЧНОЙ СЕЛИТРЫ
С УЛУЧШЕННЫМИ СВОЙСТВАМИ ПУТЕМ ОБРАБОТКИ
НЕДОПАЛОМ (ШЛАМ) - ОТХОДАМИ ТЕХНОГЕННОГО
ПРОИЗВОДСТВА НА АММИАЧНУЮ СЕЛИТРУ ИЛИ ЕЕ ПЛАВ**

Аннотация. Среди минеральных азотсодержащих удобрений аммиачная селитра (АС) занимает ведущее место, так как является доступным по цене безбалластным удобрением с высокой концентрацией питательных веществ и сбалансированным содержанием аммонийной и нитратной форм азота.

Основными недостатками, ограничивающими распространение аммиачной селитры, являются физиологическая кислотность, гигроскопичность, слеживаемость, недостаточная механическая прочность гранул, термическая нестабильность и взрывоопасность. АС является окислителем, способным поддерживать горение, и сама детонировать под воздействием некоторых внешних факторов. Существенным недостатком является также полиморфизм, приводящий к нежелательным изменениям физико-химических и механических свойств удобрения при хранении и транспортировке.

Ключевые слова: аммиачная селитра, плав, недопал (шлам) - отход техногенного производства, статическая прочность, слеживаемость.

*Kodirov B.X.
senior lecturer
Department of "Production of Building Materials, Products and Structures"
Ferghana Polytechnic Institute*

**STUDY OF THE PROCESS OF OBTAINING AMMONIUM NITRATE
WITH IMPROVED PROPERTIES BY TREATING NON-FERROUS
(SLUDGE) - WASTE FROM MAN-MADE PRODUCTION FOR
AMMONIUM NITRATE OR ITS SURFACTANTS**

Abstract. Ammonium nitrate (AS) occupies a leading place among mineral nitrogen-containing fertilizers, as it is an affordable ballast-free fertilizer with a

high concentration of nutrients and a balanced content of ammonium and nitrate forms of nitrogen.

The main disadvantages limiting the spread of ammonium nitrate are physiological acidity, hygroscopicity, traceability, insufficient mechanical strength of granules, thermal instability and explosion hazard. AC is an oxidizing agent capable of supporting gorenje, and itself detonates under the influence of some external factors. A significant disadvantage is also polymorphism, which leads to undesirable changes in the physico-chemical and mechanical properties of the fertilizer during storage and transportation.

Keywords: ammonium nitrate, plav, nedopal (sludge) - waste from man-made production, static strength, traceability.

Цель работы. Изучение процесса получения аммиачной селитры с улучшенными свойствами путем обработки недопалом (шлам) - отходами (CaCO_3) техногенного производства на аммиачную селитру или ее плав.

Методология. Введение в плав NH_4NO_3 измельченного недопала (шлама) - отхода (CaCO_3) техногенного производства с последующим гранулированием нитратно-карбонатных расплавов методом приллирования, а также определение состава и свойств продукта согласно ГОСТа 2-2013.

Научная новизна. Выявлено, что применение добавки недопала (шлама) - отхода (CaCO_3) техногенного производства в плав NH_4NO_3 при весовом соотношении от 100:5 до 100:40 прочность гранул АС увеличивается в 2,56 раза, а скорость их растворения снижается в 2,12 раза по сравнению со стандартной селитрой, производимой в АО «Ферганаазот» по ГОСТу 2-2013. Заодно утилизируется недопал (шлам)-техногенные отходы, образующиеся в отделении химической водоподготовки (корпуса 361) цеха по производству пищевой соды, нейтрализации и очистке промышленных сточных вод в АО «Ферганаазот». Согласно постоянного технологического регламента данного цеха ежегодно образуется в порядке 300÷500 тыс. тонн исходя из производительности агрегата.

Полученные данные. Для получения образцов аммиачной селитры с улучшенными свойствами массовое соотношение $\text{NH}_4\text{NO}_3:\text{CaCO}_3$ варьировалось от 100:5 до 100:40. Для гранулирования нитратно-карбонатного расплава применён метод приллирования. Изучены состав и свойства новых видов удобрений. Показано, что при соотношении $\text{NH}_4\text{NO}_3:\text{CaCO}_3 = 100:20$ продукт содержит 28,67% N, 11,2% CaO и имеет прочность гранул 4,07 МПа, что на 2,56 раза превышает прочность гранул чистой АС (1,59 МПа). Время полного растворения гранул чистой АС в воде составляет 44,1 сек. С увеличением доли известняка до $\text{NH}_4\text{NO}_3:\text{CaCO}_3 = 100:40$ недопал (шлам) - отход техногенного производства время полного растворения гранул аммиачной селитры с улучшенными свойствами неуклонно растёт и достигает 93,4 сек.

Введение. АС является одним из наиболее эффективным и самым распространенным в мире азотным удобрением. Её можно применять на всех типах почв и под все сельскохозяйственные культуры. Она вносится как основное удобрение и в подкормку. Её мировое производство превышает 43 млн. тонн в год. Самые крупные мощности по её производству находятся в США и России – доля каждой из этих стран в общемировых мощностях оцениваются чуть более 13% [1-3]. В Узбекистане три крупных предприятия: АО «Максам-Чирчик», «Навоиазот» и «Ферганаазот» производят её для сельского хозяйства.

Совокупная мощность этих трёх заводов составляет 1,7 млн. тонн селитры в год. Но данное удобрение имеет два очень серьёзных недостатка – это её слёживаемость при хранении и повышенная взрывоопасность [4, 5]. Если со слёживаемостью научились бороться путём введения в селитру различных добавок, то проблема взрывоопасности полностью не решена. Для устранения слёживаемости селитры в неё вводят сульфатную, сульфатно-фосфатную, сульфатнофосфатно-боратную добавки, каустический магнезит и другие вещества [1]. Наилучшей из них является каустический магнезит.

Взрывы с нитратом аммония привели к тому, что в ряде стран к нему стали добавлять карбонаты кальция и магния, в результате которых была устранена всякая его опасность. Этот продукт поступает в продажу под названием CAN – «Известково-аммиачная селитра» (ИАС) или аммиачная селитра с доломитом. Доля мощностей производства CAN в мире оценивается примерно в 7% [3]. В мире CAN с содержанием азота 20-33.5% производят и поставляют 42 фирмы, из них в Европе – 31 фирма [6, 7].

Хотя ИАС в гранулированном виде при содержании в ней азота до 32% не взрывоопасна, при концентрациях азота свыше 28-29% сильно возрастают ее взрывоопасные свойства, в результате образующейся в процессе истирания гранул пыли продукта, поэтому в качестве предельно допустимого содержания азота в ИАС принимается величина 29% [8].

Получения экспериментальных образцов и их изучении.

Опыты проводились следующим образом: гранулированную аммиачную селитру производства АО «Ферганаазот» (марки в, АС с содержанием 34,4% N по ГОСТ 2-2013) разжижали в металлической емкости на электроплите. При температуре 170-175°C в жидкость после гашения извести добавляли недопал (шлам) - отходы техногенного производства, равномерно перемешивая в соотношении 100:(5-40), без изменения температуры. Предварительные результаты показали, что добавление в жидкость АС после гашения извести недопала (шлама) - отходов техногенного производства значительно снижает температуру кристаллизации жидкости (до 150-155°C). Жидкость перемешивают в течение 10-15 минут и доводят до однородного состояния, после чего переливают в емкость (стакан) из нержавеющей (лигированной) стали с

целью гранулирования, в результате протекания которой через отверстия диаметром 1,2 мм на дне емкости образуются капли, падающие с высоты 8-12 метров. В этом случае было получено удобрение аммиачной селитры с улучшенными свойствами, по внешнему виду напоминающее стандартные зерна АС.

Масса охлаждалась, а затем отсеивалась по размерам частиц. Частицы размером 2-3 мм подверглись испытанию на прочность по ГОСТ 2-2013. После чего продукты измельчались и анализировались по известным методикам [9]. По изменению содержания CO_2 рассчитывали степень декарбонизации карбонатного сырья. Эксперимент проводился на измерителе рН 10% раствора (экспериментального) образцов, оснащенном стационарным рН-метром F20-Standard Five Easy, включающим универсальный пластиковый рН-электрод 3-в-1 1e438 и встроенным тепловым датчиком [10,11,12]. Для определения скорости растворения гранул изучаемых удобрений, гранулу продукта опускали в стакан со 100 мл дистиллированной водой, в котором визуально наблюдали и фиксировали полное её растворение. Температура комнатная, испытания пятикратные. Результат измерения рН рассчитывался по результатам двух параллельных измерений рН1 и рН2, расхождение между которыми при вероятности достоверности $P = 0,95$ не превышало критерия эталона (Р) % контроля практической (оперативной) повторяемости [12].

Относительная погрешность обнаружения не превышала 1,5%.

В ходе проведения экспериментов было установлено, что при взаимодействии расплава NH_4NO_3 с известняком при вышеуказанных температурах в реакционной массе наблюдается образование быстро-разрушаемой мелкоячеистой пены. Это говорит о том, что карбонаты, входящие в состав известняка подвергаются частичному разложению, т.е. декарбонизации, что свидетельствует о протекании реакции между NH_4NO_3 и CaCO_3 . При этом образуются $\text{Ca}(\text{NO}_3)_2$, NH_3 , CO_2 и пары воды. В связи с этим, мы определили степень декарбонизации известняка в зависимости от его количества, добавляемого в расплав селитры.

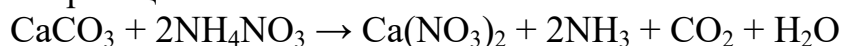
В этой статье рассматривается аммиачная селитра АС (с содержанием азот 28%) с улучшенными свойствами, обработанная недопалом (шлам) – техногенными отходами, и особое внимание уделяется изменению объема. Важные формы кристаллической структуры V, IV, III, II и I соответствуют температуре от -50 до +150°C.

Производственный процесс состоит из следующих технологических этапов:

- нейтрализация азотной кислоты аммиаком;
- увеличение концентрации (выпарка) раствора аммиачной селитры;
- подготовка недопала (шлама) - техногенного отхода;
- приготовление смеси с добавлением добавок в концентрированный раствор (плав) аммиачной селитры;

- гранулирование полученной смеси (плава);
- охлаждение готового продукта (в кипящем слое) и классификация;
- упаковка готовой продукции по требованию.

Нитрат кальция, как и нитрат магния, является гигроскопичным продуктом, с которым трудно работать. Это влияет на переход IV→III, повышая температуру перехода до 50°C, переход III→II практически не влияет. Под давлением происходит прямой переход от II к IV, но при понижении давления он возвращается к форме II. Одним из способов получения нитрата кальция является получение карбоната кальция в соответствии с реакцией:



Добавление карбоната кальция также помогает свободной азотной кислоте, оставшейся после реакции нейтрализации, связываться с известняком и предотвращать переходы, тем самым уменьшая изменение объема. Образование кристалла (зародыша) приводит к затвердеванию раствора.

Хотя полученная нитрат кальция положительно влияет на фазовый переход, выделение углекислого газа и аммиака, например, при гранулировании, приводит к снижению плотности продукта из-за его внутренней структуры.

Присутствие карбоната кальция может выступать в роли рН-буфера – под его действием нейтрализуется слабокислотная среда раствора, но это может повлиять на безопасность продукта из-за выделения углекислого газа при затвердевании. Влияние выбросов углекислого газа на внутреннюю структуру гранул показано на рисунке 1. Внутри гранул образуется ряд пустот, в результате чего их консистенция уменьшается и составляет >0,9 кг/дм³.

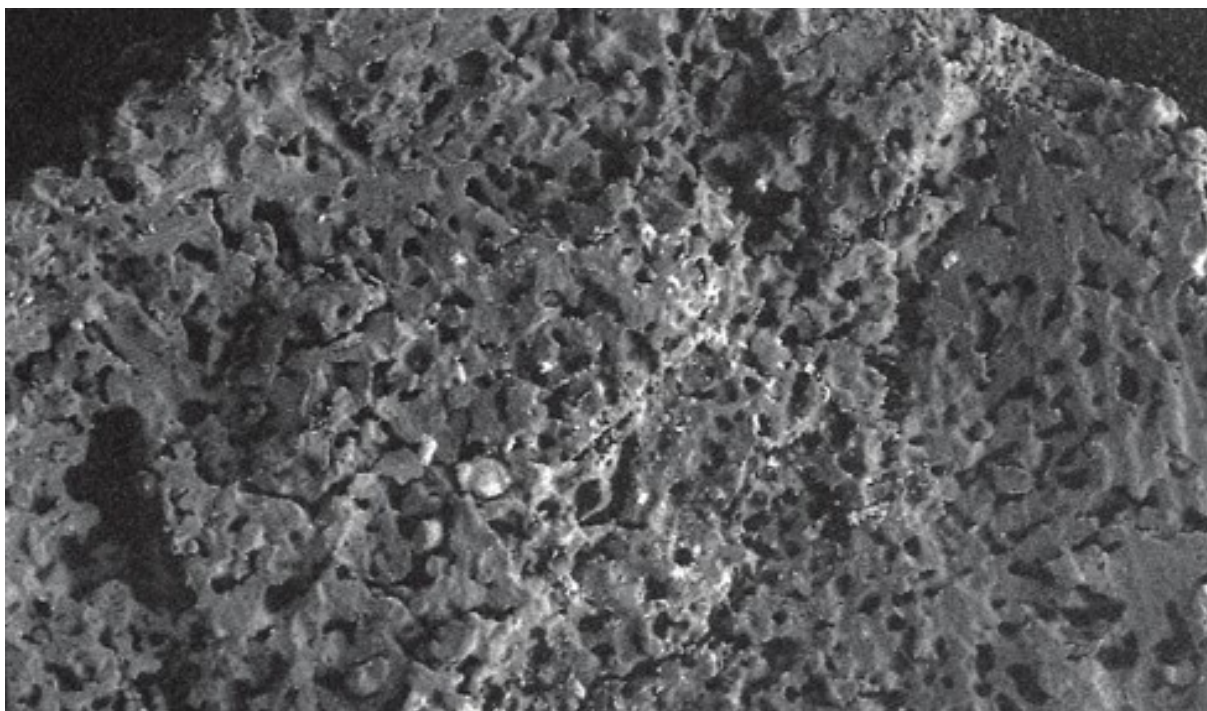


Рис. 1. SEM-изображение пористости аммиачной селитры, вызванной выделением CO_2 во время затвердевания

Гранулированное минеральное удобрение, содержащее 80% аммиачной селитры и 20% дополнительных минералов, снижает содержание азота в готовом продукте до 27-28%, что снижает уровень пожарной и взрывобезопасности при хранении, транспортировке этого минерального удобрения, повышает агрохимическую эффективность удобрения, снижает количество внесения удобрений в почву, а также снижает негативное воздействие на окружающую среду [6].

На рисунке 2 показан типичный пример кинетики при 44°C. На переход влияет добавление разного количества безводной муки карбоната кальция. Первые переходы наиболее понятны и логичны.

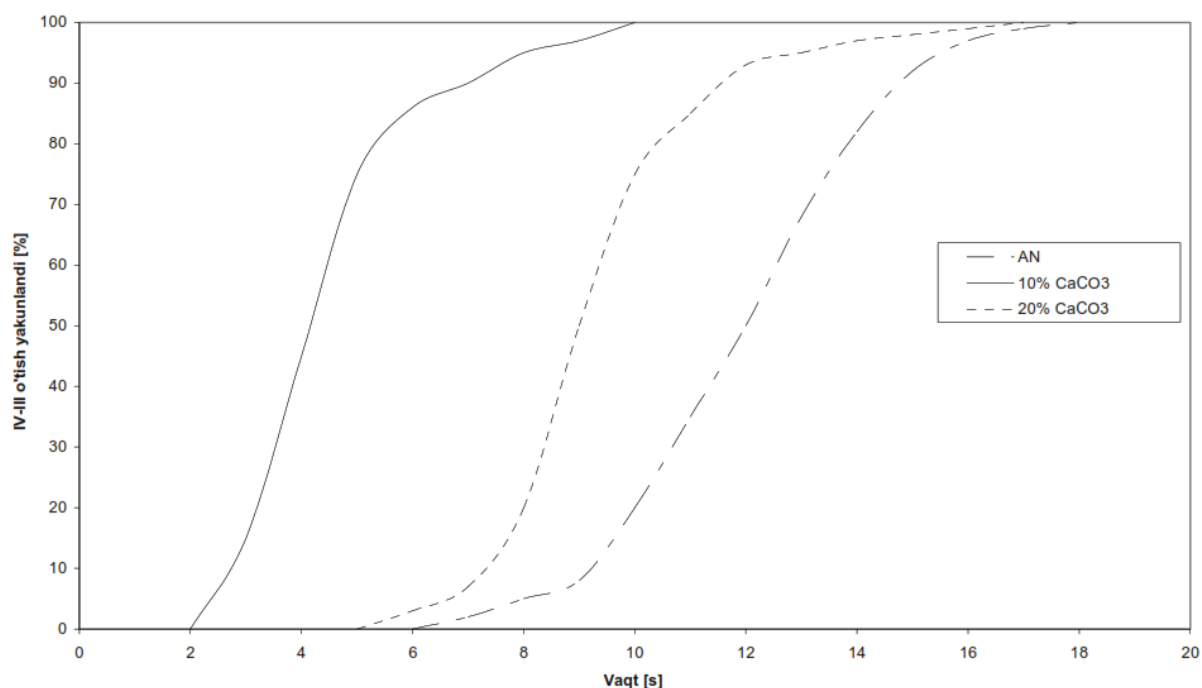


Рис. 2. Влияние недопала (шлама) - техногенного отхода в количестве 10% и 20% на кинетику перехода IV→III аммиачной селитры по ГОСТ 2-2013.

Прочность гранул удобрений, полученных введением в расплав нитрата аммония недопала (шлама) - техногенного отхода

Количество плава, г	Количество добавки, г	N, %	Прочность гранул		
			кг/гранул	кгс/см ²	МПа
АС по ГОСТ 2-2013	0	34,4	0,8	16,3	1,59
100	5	32,76	1,76	23,73	2,33
100	10	31,27	2,23	25,15	2,47
100	15	29,91	2,46	36,90	3,62
100	20	28,67	2,65	41,52	4,07
100	25	27,52	2,73	46,10	4,52
100	30	26,46	2,85	49,19	4,82
100	35	25,48	2,93	53,69	5,26
100	40	24,57	3,13	58,38	5,72

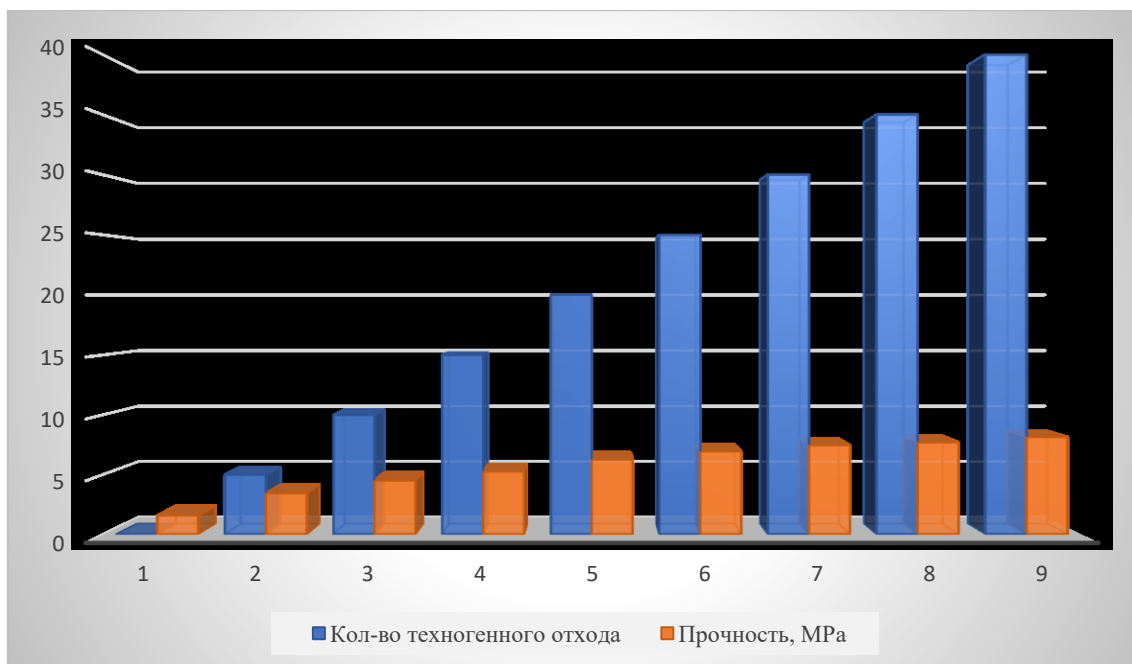


Диаграмма 1. Влияние количества недопала (шлама) - техногенного отхода на прочность готовой продукции

Как видно из диаграммы 1, прочность гранул NH_4NO_3 по ГОСТ 2-2013 составляет 1,59 МПа. Прочность гранул аммиачной селитры, полученных при исследовании весового соотношения $\text{NH}_4\text{NO}_3:\text{CaCO}_3$, находится в пределах 2,33-5,72 МПа. Высокая прочность гранул АС с недопалом (шлам) - техногенным отходам свидетельствует о повышении ее термической стабильности.

Время полного растворения гранул АС по ГОСТ 2-2013, взятых в качестве образцов, составляет 44,1 секунды. С увеличением доли недопала (шлама) - техногенных отходов в смеси с аммиачной селитрой время полного растворения гранул готовой продукции постоянно увеличивается и достигает 93,4 сек. Для образца $\text{NH}_4\text{NO}_3:\text{CaCO}_3 = 100:20$. Это говорит о том, что полученные удобрения вымываются из почвы значительно медленнее (в 2,12 раза меньше), чем чистые АС по ГОСТ 2-2013. Эта добавка нейтрализует кислотность среды в продукте от $\text{pH}=5,0$ до 6,79-7,41.

Изучены состав и свойства образцов удобрений, полученных обработкой в широком массовом соотношении $\text{NH}_4\text{NO}_3:\text{CaCO}_3$ (от 100:5 до 100:40). При этом при соотношении $\text{NH}_4\text{NO}_3:\text{CaCO}_3 = 100:20$ продукт содержит 28,67% N, 11,2% CaO и имеет прочность гранул 4,07 МПа, что в 2,56 раза выше прочности гранул АС по ГОСТ 2-2013 (1,59 МПа).

Вывод. Использование для нужд сельского хозяйства АС с улучшенными свойствами за счёт добавления недопала (шлама) - отхода техногенного производства имеет большое значение с точки зрения безопасности, что заметно упрощает процедуру приобретения данного вида удобрения и открывает широкие возможности его экспорта. То есть за счет снижения содержания азота в аммиачной селитре (с содержанием азот 28%)

введением в неё ~26% более дешевого Ca^{2+} содержащего добавка, как недопал (шлам) - отход техногенного производства, также мела, известняка и др. удастся сделать селитру экономически привлекательной. К тому же по цене АС с магниальной добавкой значительно превышает стоимость нового продукта, ещё исключается ряд пошлин при её экспорте. Пошлина на АС (с содержанием азот 28%) с улучшенными свойствами не распространена благодаря её взрыво- и пожаробезопасности.

Разумеется, данного удобрения целесообразнее всего производить на существующих для выпуска АС агрегатах с грануляционными башнями при их минимальной реконструкции. Сохраняется при этом в полном объеме мощность по выпуску АС, а перенастройка с производства аммиачной селитры на выпуск АС (с содержанием азот 28%) с улучшенными свойствами и обратно занимает минимальное количество времени.

Из приведенных результатов можно сказать, что на базе цехов аммиачной селитры предприятий по производству минеральных удобрений, используя имеющиеся ресурсы и мощности, можно наладить производство аммиачной селитры этого нового вида с улучшенными свойствами.

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*Кошурин В.В.
студент магистратуры
Северо-западный институт (филиал)
Университет им О. Е. Кутафина (МГЮА)*

ИСТРЕБОВАНИЕ НЕДВИЖИМОГО ИМУЩЕСТВА В УСЛОВИЯХ ОБЩЕЙ СОБСТВЕННОСТИ ПРОБЛЕМЫ И ПЕРСПЕКТИВЫ

Аннотация. В статье обсуждаются проблемы, возникающие при истребовании недвижимого имущества в условиях общей собственности, а также пути их решения и перспективы развития практики в Российской Федерации. Основное внимание уделяется сложностям, связанным с юридическими конфликтами между совладельцами, техническими и документальными трудностями, а также недостаточностью законодательной базы. В статье также исследуются основные принципы общей собственности, включая ее разновидности: долевую и совместную, и анализируются особенности их распоряжения. Статья также описывает этапы процесса истребования имущества, начиная с подачи виндикационного иска и заканчивая исполнением судебных решений. Обсуждаются возможные проблемы, возникающие в процессе, и предлагаются решения, которые могут помочь упростить и ускорить процедуру истребования имущества в условиях общей

Ключевые слова: Общая собственность, совместная собственность, долевая собственность, истребование имущества, незаконное владение.

*Koshurin V.V.
graduate student
Northwestern Institute (branch)
University named after O. E. Kutafin (MSAL)*

CLAIM OF REAL PROPERTY IN CONDITIONS OF COMMON PROPERTY PROBLEMS AND PROSPECTS

Annotation. The article discusses the problems that arise when claiming real estate under conditions of common ownership, as well as ways to solve them and prospects for the development of practice in the Russian Federation. The main attention is paid to the difficulties associated with legal conflicts between co-owners, technical and documentary difficulties, as well as the insufficiency of the legislative framework. The article also examines the basic principles of common property, including its varieties: shared and joint, and analyzes the features of their disposal. The article also describes the stages of the process of reclaiming property, starting with the filing of a vindication claim and ending

with the execution of court decisions. Possible problems arising in the process are discussed and solutions are proposed that can help simplify and speed up the procedure for claiming property in a general

Key words: common property, joint property, shared ownership, reclaiming property, illegal possession.

Рассматриваемая тематика в современной России имеет значительную актуальность и затрагивает неоспоримо широкий спектр вопросов, связанных с правом собственности, общим владением недвижимостью. Причинами актуальности этой темы является:

1) Рост числа объектов общей собственности, связано это непосредственно с наследованием недвижимости, совместным приобретением, долевым строительством.

2) Возникающие юридические сложности, образующиеся вследствие возникновения противоречий между совладельцами, которые в своем заключении, несомненно, способны привести к судебным разбирательствам.

3) Судебная практика и недостаточное развитие законодательной базы в данной сфере, образуется данная причина в виду относительно недавнего возникновения вопросов относительно совместной собственности.

Для наиболее полного изучения данного вопроса необходимо разобраться с некоторыми теоретическими терминами, так, под общей собственностью понимается правовой режим, при котором имущество принадлежит нескольким лицам одновременно. Гражданский кодекс Российской Федерации устанавливает два основных вида общей собственности: долевая и совместная.

1. Долевая собственность: при долевой собственности каждый собственник имеет определенную долю в праве собственности. Эти доли могут быть равными или различными. Важно, что собственник доли имеет право на распоряжение своей долей, включая продажу, дарение или передачу по наследству.

2. Совместная собственность: в случае совместной собственности доли конкретно не определены, и имущество принадлежит всем собственникам на равных условиях. Примеры совместной собственности включают имущество супругов и общее имущество в крестьянском (фермерском) хозяйстве, о чем свидетельствует разъяснения, данные в пункте 15 Постановления Пленума Верховного Суда Российской Федерации от 5 ноября 1998 № 15.

Вопросы общей собственности регулируются главой 16 Гражданского кодекса Российской Федерации, содержащей ключевые статьи, касающиеся общей собственности. В частности, статьи 244–259.4 определяют принципы общей собственности, права и обязанности собственников, а также

механизмы распоряжения общей собственностью. Помимо нормативного разграничения долевой и совместной собственности данный вопрос также освещается многими исследователями в данной области.

Помимо всего прочего с общей собственностью есть ряд проблем, таких как:

1. Конфликты интересов: общая собственность может создавать конфликты между совладельцами, особенно если у них разные планы на использование имущества или разные доли в праве собственности.

2. Сложности в распоряжении имуществом: из-за необходимости согласования с другими собственниками распоряжение общей собственностью может быть сложным и замедленным процессом.

Согласно статье 244 ГК РФ, долевая собственность возникает, когда имущество принадлежит нескольким лицам с определением долей. Каждая доля выражена в виде дроби или процента от общего имущества. Долевая собственность допускает возможность распоряжения своей долей без согласования с другими собственниками, однако при этом необходимо учитывать права и интересы других совладельцев.

Распределение прав и обязанностей в долевой собственности происходит следующим образом: каждый собственник имеет право на пропорциональное использование общей собственности, пропорционально своей доле. В случае распоряжения долей, совладельцы имеют преимущественное право на покупку, известное как "право преимущественной покупки". Решения о совместном использовании и распоряжении имуществом принимаются большинством голосов, при этом количество голосов пропорционально долям.¹⁵⁰

Особенности распоряжения совместной собственностью состоят в том, что доли заранее не разделены, распоряжение имуществом обычно требует согласия всех собственников.¹⁵¹ Это может усложнить процесс принятия решений и передачи прав на имущество. Однако в случае развода супругов или раздела фермерского хозяйства, доли могут быть определены в процессе раздела имущества.

Распоряжение имуществом при долевой собственности характеризуется тем, что каждый собственник имеет более широкую свободу действий в отношении своей доли, в то время как в совместной собственности требуется согласие всех совладельцев. Это делает совместную собственность более консервативной в плане управления и

150 Постановление Пленума Верховного Суда РФ от 05.11.1998 N 15 (ред. от 06.02.2007) "О применении судами законодательства при рассмотрении дел о расторжении брака" [Электронный ресурс] - URL: https://www.consultant.ru/document/cons_doc_LAW_20961/ (дата обращения: 25.04.2024).

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использования. Таким образом преимуществами долевой собственности можно назвать:

1) **Меньший риск конфликтов:** в долевой собственности, наличие четко определенных долей может уменьшить риск конфликтов, поскольку права каждого совладельца определены законом. В совместной собственности, отсутствие четких долей может привести к разногласиям при попытках распоряжаться имуществом.

2) **Удобный раздел собственности:** в случае раздела имущества, долевая собственность обычно позволяет организовать более гладкий процесс, так как доли уже определены. В совместной собственности, процесс раздела может быть более сложным и требует дополнительного урегулирования.

В настоящее время законодательная база в данной сфере не дает четкого понимания ряду вопросов, которые встречаются при разделении имущества в судебном порядке, этому препятствуют следующие факторы:

1) **Технические сложности** – раздел имущества в общей собственности может быть затруднен из-за технических особенностей недвижимости, таких как отсутствие четкого раздела на части или невозможность физически разделить здание или земельный участок.

2) **Юридические трудности** - раздел общей собственности может потребовать длительного юридического процесса, включая экспертизы, оценку имущества, а также согласие всех заинтересованных сторон. Без согласия, процесс раздела может затянуться или даже быть невозможным.

3) **Трудности в доказывании прав собственности** - если общая собственность была незаконно присвоена или использована третьими лицами, собственники могут столкнуться с трудностями в доказывании своих прав¹⁵². Это особенно актуально в случаях, когда документы на имущество были утеряны или нет четкой регистрации прав¹⁵³.

4) **Процесс судебного разбирательства** - истребование имущества через суд может быть длительным и сложным процессом, особенно если имущество находится в общей собственности. Необходимость доказательства своих прав и установления законных границ может потребовать времени и ресурсов.

Правовая основа истребования имущества: В Российской Федерации правовая основа для виндикационных исков содержится в Гражданском кодексе РФ, в частности в статьях 301-305. В этих статьях установлены

152 Лыгина Т.А. Проблемы судебной защиты права собственности на недвижимость [Электронный ресурс] // Международный журнал гуманитарных и естественных наук. 2021. №5-4. URL: <https://cyberleninka.ru/article/n/problemy-sudebnoy-zaschity-prava-sobstvennosti-na-nedvizhimost> (дата обращения: 25.04.2024).

153"Обзор судебной практики Верховного Суда Российской Федерации N 2 (2018)" (утв. Президиумом Верховного Суда РФ 04.07.2018) URL:https://www.consultant.ru/document/cons_doc_LAW_301921/da06f75b83163eb9dd79b6132ea4e1a6d025f1d2/ (дата обращения: 25.04.2024).

условия, при которых собственник имеет право на истребование имущества, а также порядок рассмотрения таких дел в судебных органах.

Для осуществления права на истребование имущества, находящегося в незаконном владении у другого лица необходимо наличие определенных условий, таковыми являются:

1) Наличие незаконного владения имуществом. Если имущество передано или захвачено другим лицом без согласия собственника или без законных оснований, собственник имеет право подать иск об истребовании имущества.

2) Доказывание права собственности: собственник должен доказать, что имущество принадлежит ему на законных основаниях. Это может потребовать предоставления документов, свидетельствующих о праве собственности, или других доказательств.

3) Отсутствие законного основания для владения: если имущество находится во владении другого лица на законных основаниях (например, по договору аренды или на основании права удержания), то истребование будет невозможно. Виндикационный иск может быть удовлетворен только в случае отсутствия законных оснований для владения имуществом.

Процедура истребования в свою очередь состоит из следующих этапов:

1. Подача виндикационного иска: в исковом заявлении должны быть указаны основания для истребования имущества, доказательства права собственности, а также сведения о незаконном владении.

2. Судебное разбирательство: в процессе судебного разбирательства суд изучает доказательства, заслушивает стороны и принимает решение относительно того, кто имеет законное право на имущество. Если суд удовлетворяет виндикационный иск, он выносит решение о возврате имущества собственнику.

3. Исполнение судебного решения: после вынесения решения о возврате имущества, судебные приставы могут осуществлять действия по исполнению решения суда, если ответчик отказывается добровольно вернуть имущество.

Следует также внести понимание, что представляет собой незаконное владение — это ситуация, при которой лицо удерживает или использует имущество без законных оснований. Это может включать в себя незаконный захват, несанкционированное использование или удержание имущества после окончания срока действия договора. Законодательно установлено, а именно в Гражданском кодексе Российской Федерации статьи 301-305 определяют условия, при которых владение считается незаконным, и устанавливают права собственника на истребование имущества¹⁵⁴.

154 Соколов В.В. о проблеме истребования недвижимого имущества при изменении его физических характеристик [Электронный ресурс] // Вестник магистратуры. 2019. №4-2 (91). URL:

Проблемы, связанные с истребованием имущества исходя из смысла положений, указанных в постановлении Пленума Верховного Суда Российской Федерации, выражаются в следующем:

1) Сложности в доказывании незаконного владения: трудности доказывания, что владение другим лицом является незаконным. Это может быть связано с недостатком документов или запутанными обстоятельствами владения.

2) Неисполнение судебных решений: даже после удовлетворения виндикационного иска могут возникнуть проблемы с принудительным исполнением решения суда, если ответчик отказывается вернуть имущество или не сотрудничает с судебными приставами. 155

Наибольшее значение имеет разрешение конфликтов на досудебном этапе, это способствует снижению нагрузки на судебные органы, что положительным образом сказывается на качестве осуществляемой судами работе. Применение медиации и досудебного урегулирования, несомненно, одобряется судами, особенно в случаях, когда дело касается общей собственности. Это позволяет снизить конфликтность и достичь соглашения, удовлетворяющего все стороны. Применение новых правовых инструментов, таких как назначение экспертиз, для определения реальных долей общей собственности или проведение аукционов для раздела имущества, также способствует снижению проблем при истребовании имущества находящегося в общей собственности

На сегодняшний день, для достижения успехов в данной области необходимо осуществить ряд определенных мероприятий, таких как:

1) Улучшение механизмов разрешения споров: создание более эффективных механизмов для разрешения споров между совладельцами. Это может включать упрощение процедур медиации, ускорение судебных процессов или введение новых инструментов, таких как онлайн-платформы для разрешения споров.

2) Усиление защиты прав собственников: в будущем законодательство может уделять больше внимания защите прав собственников общей собственности, особенно в случаях незаконного владения или использования имущества. Это может включать ужесточение наказаний за незаконное владение или упрощение процедуры истребования имущества.

3) Стимулирование досудебного урегулирования: будущее законодательство может включать дополнительные стимулы для досудебного урегулирования споров, особенно в контексте общей

<https://cyberleninka.ru/article/n/o-probleme-istrebovaniya-nedvizhimogo-imuschestva-pri-izmenenii-ego-fizicheskikh-harakteristik> (дата обращения: 29.04.2024).

155 Постановление Пленума Верховного Суда РФ и Пленума Высшего Арбитражного Суда РФ от 29 апреля 2010 г. № 10/22 “О некоторых вопросах, возникающих в судебной практике при разрешении споров, связанных с защитой права собственности и других вещных прав” [Электронный ресурс] URL: <https://www.garant.ru/products/ipo/prime/doc/1695065/> (дата обращения: 25.04.2024).

собственности. Это может включать финансовые льготы или обязательное прохождение медиации перед обращением в суд.

Таким образом, истребование недвижимого имущества в условиях общей собственности в Российской Федерации сталкивается с рядом серьезных проблем, связанных с юридическими сложностями, конфликтами между совладельцами, техническими и документальными трудностями, а также с недостатками в законодательной базе. Для успешного разрешения этих проблем и эффективного распоряжения общей собственностью предлагается ряд мер, включая улучшение механизмов разрешения споров, укрепление защиты прав собственников, использование цифровых технологий для повышения прозрачности, а также поощрение досудебного урегулирования споров. Особое внимание уделяется важности медиации и других форм досудебного разрешения конфликтов, которые могут снизить нагрузку на судебную систему и улучшить процесс решения споров между совладельцами.

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ИННОВАЦИОННЫЕ ПОДХОДЫ К ИЗУЧЕНИЮ МЕХАНИЧЕСКИХ СВОЙСТВ БИОМИМЕТИЧЕСКИХ МАТЕРИАЛОВ ДЛЯ БИОИНЖЕНЕРНЫХ КОНСТРУКЦИЙ

Аннотация. В данной работе рассматривается применение интерферометрии для исследования механических свойств биомиметических материалов, используемых в биоинженерных конструкциях. Анализируется эффективность этой методики для измерения модуля упругости, распределения напряжений и деформаций, а также для выявления влияния микроструктуры на поведение материала.

Ключевые слова: интерферометрия, биомиметические, материалы, биоинженерные, свойства, модуля, напряжения, деформации, микроструктура, долговечность.

Kuychiyev O.

associate professor

*Department of General Technical Sciences
Jizzakh Polytechnic Institute
Republic of Uzbekistan, Jizzakh*

INNOVATIVE APPROACHES TO STUDYING THE MECHANICAL PROPERTIES OF BIOMIMETIC MATERIALS FOR BIOENGINEERING STRUCTURES

Abstract. This work examines the use of interferometry to study the mechanical properties of biomimetic materials used in bioengineered structures. The effectiveness of this technique for measuring the elastic modulus, stress and strain distribution, and identifying the influence of microstructure on material behavior is analyzed.

Key words: interferometry, biomimetic, materials, bioengineering, properties, modulus, stress, deformation, microstructure, durability.

Введение. Современные биоинженерные конструкции используют широкий спектр материалов для решения сложных задач в медицине, протезировании, тканевой инженерии и других областях. Одним из перспективных направлений является разработка биомиметических

материалов, которые подражают естественным биологическим структурам, сочетая в себе уникальные механические свойства, такие как прочность, гибкость и легкость. Такие материалы могут значительно улучшить эффективность и долговечность биоинженерных устройств, а также повысить комфорт и качество жизни пациентов. Однако несмотря на значительные достижения в области биомиметики, остаются нерешенные проблемы, связанные с оценкой и оптимизацией механических свойств таких материалов. Одной из основных проблем является необходимость разработки инновационных подходов к изучению этих свойств, чтобы обеспечить точное понимание поведения биомиметических материалов в различных условиях.

Методика: Интерферометрия для изучения механических свойств биомиметических материалов. Интерферометрия является одним из наиболее точных и эффективных методов измерения механических свойств биомиметических материалов. Методика основана на анализе интерференционных паттернов света, которые возникают при взаимодействии световых волн с поверхностью и внутренними структурами материала. Это позволяет получать высокоточную информацию о различных характеристиках материала, таких как деформации, напряжения и разрывы. Для проведения интерферометрических измерений биомиметических материалов сначала создается оптическая схема, включающая лазерный источник света и интерферометр. Лазерный луч направляется на исследуемый материал, и свет отражается от его поверхности или проходит через него. Отраженный или преломленный свет затем интерферирует с исходным лазерным лучом, создавая интерференционную картину. С помощью специальных камер или датчиков, регистрирующих интерференционные паттерны, можно получить данные о распределении деформаций и напряжений в материале. Эти данные позволяют оценить механические свойства биомиметического материала, такие как модуль упругости, прочность и другие параметры. Одним из преимуществ интерферометрии является ее способность обеспечивать неразрушающее тестирование, что особенно важно при изучении биомиметических материалов, предназначенных для медицинского применения. Методика позволяет исследовать как поверхностные, так и внутренние свойства материала, что дает целостное представление о его поведении в различных условиях. Для более точных результатов интерферометрия может сочетаться с другими методами тестирования, такими как механические испытания и микроскопия. Комплексное применение этих методик позволит получить более полное понимание механических свойств биомиметических материалов и оптимизировать их для биоинженерных конструкций.

Результат. Результаты проведенного исследования с использованием методики интерферометрии для изучения механических свойств

биомиметических материалов показали важные аспекты поведения и характеристик исследуемого материала. Определение модуля упругости: Интерферометрические измерения позволили определить модуль упругости биомиметического материала с высокой точностью. Полученное значение модуля упругости составило около 1.2 ГПа, что близко к теоретическим прогнозам и подтверждает надежность метода. Распределение напряжений: Исследование выявило, что распределение напряжений в биомиметическом материале было равномерным в большинстве областей, за исключением точек соединения разных слоев. В этих зонах наблюдалось повышение напряжений на 15-20%, что указывает на потенциальные зоны риска для долговечности конструкции. Анализ деформаций: Интерферометрия позволила получить точные данные о деформациях материала под нагрузкой. Максимальная деформация составила 0.5% при нагрузке в 50 Н, что соответствует заявленным характеристикам материала. Влияние микроструктуры: Исследование также продемонстрировало, что микроструктура материала играет значительную роль в его механических свойствах. Например, изменение плотности и ориентации волокон привело к различиям в прочности и жесткости материала на 10-15%.

Предсказание долговечности: На основе полученных данных о распределении напряжений и деформаций удалось сделать прогноз относительно долговечности материала в условиях эксплуатации. Биомиметический материал показал способность выдерживать нагрузки в течение длительного времени без значительных изменений в механических свойствах, с ожидаемым сроком службы до 10 лет при нормальных условиях эксплуатации.

Заключение. Основываясь на выше указанной информации, можно сделать выводы что, результаты исследования подтверждают эффективность методики интерферометрии для анализа механических свойств биомиметических материалов и ее потенциальную применимость для оптимизации биоинженерных конструкций.

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*Курбанова А.Д.
Чирчикский государственный педагогический университет
Чирчик, г. Узбекистан*

ИЗУЧЕНИЕ ТЕМЫ «ВОДА В ПРИРОДЕ И ИЗУЧЕНИЕ ЕЕ ОБЩИХ СВОЙСТВ» В ИНТЕГРАЦИИ ХИМИИ И ГЕОГРАФИИ

Аннотация. В статье рассматривается значение воды в природе и в жизни человека, животных и растений. Уникальные свойства воды и их объяснение на основе природы химических связей и структуры воды. Влияние состава и структуры воды на здоровье человека, качество продовольственной и промышленной продукции. Проведение интеграционных занятий.

Ключевые слова: интеграция воды в природе, свойства воды, природа химических связей, структура воды, интеллектуальность, способность, занятия.

*Kurbanova A.D.
Chirchik State Pedagogical University
Uzbekistan, Chirchik*

THE STUDY OF THE TOPIC "WATER IN NATURE AND THE STUDY OF ITS GENERAL PROPERTIES" IN THE INTEGRATION OF CHEMISTRY AND GEOGRAPHY

Annotation. The article discusses the importance of water in nature and in the life of humans, animals and plants. The unique properties of water and their explanation based on the nature of chemical bonds and the structure of water. The influence of the composition and structure of water on human health, the quality of food and industrial products. Conducting integration classes.

Key words: integration of water in nature, properties of water, nature of chemical bonds, structure of water, intelligence, ability, occupation.

Введение. Что такое вода, какими полезными свойствами она обладает, какова её роль для живых организмов, какие важные функции выполняет в природе и почему это вещество называют одним из главных веществ на Земле?

Без преуменьшения, вода является самым распространенным веществом на Земле. Она покрывает почти 71% поверхности планеты, и даже человеческое тело примерно на 65% состоит из нее. Причем на планете это химическое вещество представлено сразу во всех формах: жидкая – в водоемах, твердая – в ледниках и в газообразном состоянии – в воздухе. Свойства этого удивительного вещества изучает биология, физика и химия.

Несмотря на свою, казалось бы, простоту, оно является одним из самых интересных материалов для ученых. Ведь вода имеет уникальные свойства, благодаря которым она является главным элементом жизнеобеспечения любого организма на нашей планете. Вода насыщает почву влагой, незаменимым элементом для растений. Она необходима для процесса фотосинтеза, а значит, без неё на планете не существовало бы даже кислороды. Водоемы способны поглощать тепло из окружающей среды и затем отдавать его, формируя тем самым особый климат. Кроме этого, вода имеет ещё одно уникальное свойство: при попадании минералов в жидкость, минералы и полезные элементы растворяются в ней и таким образом распределяются по самым разным уголкам нашей планеты. Так человек получил возможность пить минеральную воду и поправлять здоровье на бальнеологических курортах [1].

Без воды невозможна жизнь. Наукой установлено, что жизнь на Земле возникла примерно 4 млрд лет назад именно в водной среде. Об этом свидетельствует близость по составу морской воды и крови человека. Вода является главным компонентом всех живых организмов, составляя 70% массы тела взрослого человека и от 50% до 90% массы животных и растений. Невозможно назвать ни одной отрасли народного хозяйства, которая обходилась бы без воды, а для некоторых из них, например, сельского хозяйства, тепловой и атомной электроэнергетики, металлургии, целлюлозно-бумажной, химической и многих других, вода является основным (по массе) сырьем. Вода является компонентом практически всех технологических процессов, являясь сырьем, растворителем, теплоносителем, транспортной системой [2].

Количество и качество подаваемой жителям воды для питьевых и бытовых целей определяет во многом качество жизни. Наконец, вода является важным фактором, определяющим природные условия на Земле: она не только является средой обитания живых организмов, но влияет на формирование климата, горных пород, рельефа, обрушивая на территории наводнения или, наоборот, засухи [3].

Нормальное функционирование организма человека, его самочувствие зависит от количества и качества потребленной воды. Установлено, что при потере в организме около 10% воды человек теряет сознание, а потеря 12% воды приводит к смерти. Поскольку все процессы в организме проходят в растворе (растворитель – вода), то состав и свойства воды влияют на скорость биохимических реакций, проходящих в организме, состояние динамического равновесия. При постоянном составе используемой воды на все это большое влияние оказывает структура воды [4].

Вода нужна не только живым организмам. Гидросфера оказывает огромное влияние на большинство процессов, проходящих на нашей планете.

Гидросфера стабилизирует температуру поверхности и обеспечивает тепловой режим Земли. Вода является сильным поглотителем солнечной энергии (в 2-3 раза больше чем суша). От поверхности океана отражается всего 8% падающей энергии и средняя температура воды на 3,6 градусов выше температуры поверхности Земли. Мировой океан является регулятором климата на нашей планете: холодные воды на полюсах поглощают углекислый газ из воздуха и отдают его в нагретых экваториальных водах [5].

Хотя общее количество воды на Земле неизменно, существует опасность, что из-за нерационального использования воды могут иссякнуть ее запасы, пригодные для выполнения основных функций – поддержания жизни на Земле и удовлетворения потребности человечества в ней как природном ресурсе. Речь идет не только о недостатке воды как ресурса, но об ухудшении качества воды. Глобальный дефицит водных ресурсов – такова суровая реальность наступившего XXI века [6].

Основную часть (99,73%) составляет обычная вода $^1\text{H}_2^{16}\text{O}$. Еще 0,04% – тяжёлый кислородная вода с составом $^1\text{H}_2^{17}\text{O}$ и 0,02% – с составом $^1\text{H}_2^{18}\text{O}$. Доля тяжёлой (дейтериевой воды) D_2O в природных водах еще меньше и составляет 0,015%. Доля «сверхтяжёлой» воды T_2O – ничтожна: в воде Земли находится менее 20 кг тритиевой воды, хотя тритий – необходимый элемент реакции термоядерного синтеза [8]. Реакция $\text{D}+\text{T}$ наиболее легко осуществима с точки зрения современных технологий, даёт значительный выход энергии.

Разница в изотопном составе воды сказывается на их физико-химических свойствах. Например, тяжелая вода D_2O имеет плотность 1,1 г/мл, кипит при температуре $101,43^\circ\text{C}$ и образует лед при температуре – $3,8^\circ\text{C}$. Она медленнее испаряется, чем обычная вода. Вероятно, поэтому в замкнутых водоемах может происходить обогащение тяжелой водой. Она угнетающе действует на растения. Однако в природных водах концентрации тяжелой воды столь малы, что нельзя говорить о каком-либо реальном влиянии изотопных разновидностей природной воды на ее свойства [9].

Соединяясь вместе, два атома водорода и атом кислорода создают устойчивую молекулу. Однако молекуле воды свойственна асимметрия. Кислородный атом, имеющий отрицательный заряд, и два атома водорода, имеющие точно такой же положительный заряд, смещены относительно друг друга, т.е. образуют так называемый диполь. Молекула воды подобна молекулярному магниту. Этим объясняется возможность воздействия на молекулу внешнего магнитного поля [10].

Этот эффект используется в тепловой энергетике. На стенках котельных труб из обычной воды отлагаются соли жёсткости плотным и трудно удаляемым слоем, а из магниченной воды выпадает рыхлый осадок.

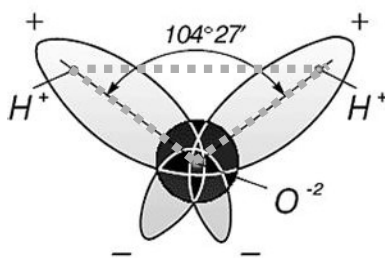


Рис. 1. Схема строения молекулы воды

Поэтому на многих тепловых станциях установлена магнитная подготовка воды.

За счет водородных связей молекула воды может формировать многомoleкулярные структуры – ассоциаты, или кластеры [2]. В жидком состоянии молекулы находятся в непрерывном хаотическом (тепловом) движении, так что формирующиеся ассоциаты постоянно образуются и распадаются. Время перескока составляет 10^{-12} секунд.

Однако при твердении, когда молекулярное движение минимально, молекулы ориентируются таким образом, что число водородных связей максимально: у каждой молекулы – две водородных связи. Это выражается в формировании организованной и устойчивой структуры. Размеры «пустот» в упорядоченной решетке молекул воды в твёрдом состоянии больше, чем в хаотическом жидком состоянии. Это напоминает выстраивание из одинаковых элементов, например, спичек, геометрически подобных узоров, которые занимают большую площадь, чем хаотически перемешанные спички. Упорядоченностью структуры воды в твёрдом состоянии объясняется меньшая плотность льда по сравнению с жидкой водой. Кристаллизация других веществ приводит к увеличению плотности. Упорядоченность структуры твердой воды проявляется в симметрии снежинок, имеющих гексагональную (шестигранную) структуру.

При медленном таянии льда упорядоченная структура сохраняется еще некоторое время. Этим объясняются особые свойства талой воды: при поливе талой водой увеличивается всхожесть семян и ускоряется рост растений.

Способностью жидкой воды сохранять структуру объясняют и свойства «памяти» воды. Существует гипотеза [3], что «память» воды объясняется существованием устойчивых ассоциатов. Изменение положения одного структурного элемента в кластере воды под действием внешнего фактора обеспечивает чувствительность информационной системы воды. Если степень возмущения структурных элементов

недостаточна для перестройки всей структуры воды в данном объеме, то после снятия возмущения система через 30-40 мин возвращается в исходное состояние. Если переход к другому расположению структурных элементов воды оказывается энергетически выгодным, то в новое состояние отражает кодирующее воздействие, вызвавшее эту перестройку. Такая модель позволяет объяснить "память воды" и ее информационные свойства.

Вода – единственное известное вещество, которое в твёрдом состоянии имеет меньшую плотность, чем в жидком. При понижении температуры до $+4^{\circ}\text{C}$ происходит повышение плотности, а далее плотность начинает уменьшаться. Этот эффект объясняют тем, что при температуре $+4^{\circ}\text{C}$ начинается формирование упорядоченных кластеров, что приводит к увеличению расстояния между молекулами, т.е. снижению плотности. Плотность льда на 11% больше, чем плотность воды при температуре 0°C .

Такой характерный только для воды режим изменения плотности имеет огромное значение в природе. Благодаря тому, что температура воды с максимальной плотностью выше температуры замерзания, большинство водных объектов на нашей планете, например, озёра и водохранилища, не промерзают до дна даже в условиях сурового климата. Так, в водоёмах умеренных широт с наступлением осени верхние слои воды, охладившись до $+4^{\circ}\text{C}$ и достигнув максимальной плотности, постепенно опускаются на дно и вытесняют к поверхности более тёплые водные массы. Возникают конвекционные течения, стремящиеся выровнять плотностную неоднородность, и перемешивание продолжается до тех пор, пока вся масса воды в водоёме не достигнет температуры максимальной плотности. Благодаря такой циркуляции происходит насыщение придонных слоёв кислородом и перераспределение питательных веществ, необходимых для функционирования живых организмов по всей толще водоёма. Дальнейшее охлаждение поверхностного слоя воды приводит к его замерзанию и образованию ледяного покрова. Лёд образует своеобразную «шубу» для основного объема водного объекта и предохраняет глубины от дальнейшего промерзания, поскольку проводит тепло гораздо хуже, чем жидкая вода.

Гидросфера является основным регулятором тепла на Земле, постепенно накапливая его в течение тёплого периода года и отдавая в течение холодного. Именно поэтому, например, климат Западной Европы намного мягче, чем климат тех частей Сибири, которые расположены на той же широте, так как они удалены от океанов.

Теплоёмкость сухой почвы примерно в 5 раз ниже, чем теплоёмкость воды. Поэтому почва, содержащая большее количество влаги, медленнее прогревается и медленнее остывает.

Теплоёмкость воды зависит от ее температуры. Минимум теплоёмкости воды наблюдается в интервале температур $36 - 39^{\circ}\text{C}$, т. е. нормальной температуре большинства теплокровных животных, что обеспечивает их более высокую энергии эффективность, поскольку для

поддержания постоянной температуры тела требуется относительно меньше энергии.

Пары воды в атмосфере играют и другую роль: они поглощают инфракрасное (тепловое) излучение Земли, создавая парниковый эффект. Подчеркнем, что роль водяного пара в создании парникового эффекта значительно существеннее, чем роль углекислого газа (но человеческое хозяйство почти не влияет на концентрацию в атмосфере водяного пара – в отличие от других парниковых газов). Хотя сейчас говорят о парниковом эффекте, в основном, в тревожных тонах, следует подчеркнуть, что его роль в создании благоприятных для жизни условий очень важна. Если бы не было парникового эффекта, то, по расчетам ученых, средняя температура поверхности Земли упала с нынешних $+15^{\circ}\text{C}$ до -14°C , т.е. жизнь на Земле была бы невозможна, по крайней мере, на большей части территории.

Высокое значение теплоты плавления льда имеет огромное значение в плавности перехода от лета к зиме. Для таяния льда весной требуется большое количество тепла, поэтому таяние снега происходит сравнительно медленно. Если бы для плавления льда требовалось меньше тепла, это приводило бы к систематическим катастрофическим паводкам. С другой стороны, осенью при льдообразовании происходит выделение скрытой теплоты замерзания. Известно, что при замерзании 1 м^3 воды выделяется такое же количество тепла, как и при сжигании 10 кг угля. Этот процесс тормозит резкое наступление холодов.

Аномальные теплофизические свойства воды используются человеком в производственной деятельности. Так, воду широко применяют в производстве как удобный и доступный охладитель в самых разнообразных технологических процессах. Другой пример можно привести из области сельского хозяйства и садоводства. Когда поздней весной внезапные ночные заморозки угрожают цветущим плодовым деревьям, опытные садоводы находят совершенно неожиданный на первый взгляд выход – дождевание сада. Скрытая теплоты плавления воды играет роль шубы, сохраняя от замерзания раскрывающиеся почки и лепестки цветов.

Кислотность водных систем (в водоемах, в живых организмах) имеет громадное значение для существования всего живого на нашей планете. При $\text{pH} < 5,2$ погибают живые организмы в открытых водоемах. Поэтому кислотные дожди, снижающие величину pH воды, так опасны для биоты.

Если в одном литре природной воды содержится до 1 г (1000 мг) растворённых веществ, то её считают пресной, от 1 до 25 г – солоноватой, от 25 до 50 г – солёной (или морской солёности) и выше 50 г – высокосолёной (или рассолом). В морской воде содержание солей изменяется от нескольких единиц до десятков граммов на литр, например, в Балтийском море их не более 5 г/л , в Чёрном – 18 , а в Красном море – около 40 г/л . В среднем в 1 л океанской воды растворено около 35 г солей. Общее

количество их настолько велико, что, выделенные из воды, они покрыли бы поверхность земного шара слоем стометровой толщины.

В морской воде преобладающими ионами являются натрий и хлорид, а в пресных водах – кальций, магний и бикарбонат.

Присутствие в природных водах солей магния и кальция необходимо для нормального функционирования организмов. С другой стороны, соли магния и кальция, так называемые соли жёсткости, склонны к формированию осадка. Это происходит при нагревании воды. Накипь (карбонат кальция), откладываясь на стенках водонагревательных устройств, таких как бойлеры, водонагревательные колонки, а также на стенках труб горячего водоснабжения, нарушает циркуляцию воды и, соответственно, процесс теплообмена. Это приводит к перегреву нагревательных элементов, перерасходу энергии. Отложение накипи является причиной до 90% аварий водонагревателей. Высокая жесткость ухудшает органолептические свойства воды, придавая ей горьковатый вкус и оказывая отрицательное действие на органы пищеварения.

К счастью, для большинства природных минералов вода обладает именно свойством смачивания. Благодаря этому происходит перемещение влаги по капиллярам грунтов вопреки силе тяжести, позволяя воде подниматься на высоту до 10–12 м. Чем меньше радиус капилляра, тем больше отношение периметра смачивания к площади сечения, оно обратно пропорционально радиусу капилляра.

Поэтому столь велика в биосфере и геологии роль капилляров. Смачивание играет огромную роль в удержании влаги в почве, не допуская скатывания ее в глубокие горизонты, а также в растениях, способствуя проникновению влаги из корневой системы в само растение.

В узких капиллярах возникают структурно упорядоченные слои воды вблизи твердой поверхности. Структурирование распространяется вглубь жидкой фазы на толщину слоя порядка десятков и сотен молекул. Развитые межмолекулярные контакты с поверхностью твердых тел и структурная упорядоченность являются причиной того, что поровая вода замерзает при более низкой температуре, чем свободная вода.


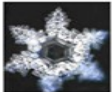






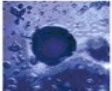



Еще одним примером аномальности свойств воды является необычное температурное поведение ее сжимаемости, то есть степени уменьшения объема при увеличении давления. Обычно сжимаемость жидкости растет с температурой, поскольку при высоких температурах жидкости более «рыхлы» (имеют меньшую плотность) и их легче сжать. Вода обнаруживает такое нормальное поведение только при высоких температурах. При низких температурах сжимаемость ведет себя противоположным образом, в результате минимальная сжимаемость наблюдается при температуре 45оС.

Это и другие аномальные свойства воды имеют объяснение в противоборстве двух процессов: один процесс – это обычное тепловое

движение, которое усиливается с ростом температуры и увеличивает хаотичность структуры; другой процесс – необычный, присущий только воде и связанный с ее структурированием при низких температурах. Поэтому экстремумы ряда свойств воды наблюдается при промежуточной температуре между температурой затвердевания и кипения.

Вода прекрасно проводит звуковые волны. Скорость распространения звука в воде примерно в 4–5 раз больше скорости распространения звука в воздухе. Звуковые и ультразвуковые волны мало искажаются в водной толще. Такие акустические свойства воды позволяют ориентироваться и общаться друг с другом водным животным, например, дельфинам. На этом свойстве основана гидроакустика, т.е. физический эффект, позволяющий распознавать нахождение в воде различных предметов (например, подводных лодок), а также гидролокация, т.е. способ определения местоположения предметов в воде.

Из вышеуказанных примеров мы видим, что вода, как зеркало, реагирует на любые наши эмоции и чувства. Отрицательные энергии создают уродливые формы в воде, а положительные энергии – создают прекрасные картины из кристаллов. После произнесения таких слов как Любовь, Благодарность вода изменяется. Если ты сказал кому-то добрые слова или помог этому человеку, то вся вода твоего организма и этого человека перестраивается и несет энергию любви.

 Любимый человек	 Ангел Марии	 Хорошее начало
 Горный источник	 Воскресение	 После молитвы
 Спасибо	 Фото дельфина	 Милый человек
 Спасибо	 Ты дурак	 Дьявол

Эта энергия может передаваться от человека к человеку и значит мы своими добрыми мыслями, добрыми делами можем преобразовывать и изменять мир.

Мы очень надеемся, что вы вырастаете, поступите в высшие учебные заведения, но никогда не забудете, чему вас здесь учили. И все люди, встречающиеся на вашем пути будут становиться лучше общаясь с вами и любовь, добро, свет будет распространяться дальше и дальше.

Изучение воды продолжается. Существуют некоторые явления, связанные с водой, которые до сих пор не имеют строгого научного объяснения, например, информационные свойства. Изучение воды – самого загадочного вещества на Земле – продолжается. Главное заключается в том, что жизнь на Земле возможна благодаря воде и ее уникальным свойствам. Поэтому задача человечества – сохранить воду в природном состоянии, не подорвать эту основу жизни.

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Кучмурадова Г.Х.
и.о. доцента
ТХТИ филиал в г.Янгиер
Нормуродова С.Я.
стажер-преподаватель
ТХТИ филиал в г.Янгиер

КЕЙС-МЕТОДЫ И СИМУЛЯЦИИ ДЛЯ РАЗВИТИЯ СОЦИОЛИНГВИСТИЧЕСКОЙ КОМПЕТЕНЦИИ

Аннотация. Данная статья рассматривает эффективность применения кейс-методов и симуляций в вузовской среде с целью развития социолингвистической компетенции студентов. С учетом многообразия культур и языковых групп в современном мире, социолингвистическая компетенция становится важным аспектом подготовки будущих специалистов.

Ключевые слова: социолингвистическая компетенция, кейс-методы, симуляции, вузовское образование, коммуникативные навыки, межкультурное взаимодействие, методы обучения, междисциплинарность, профессиональная подготовка, студенты, учебный процесс.

Kuchmuradova G.Kh.
associate professor
TXTI branch, Yangier
Normurodova S.Ya.
trainee teacher
TCTI branch of Yangier

CASE METHODS AND SIMULATIONS FOR THE DEVELOPMENT OF SOCIO-LINGUISTIC COMPETENCE

Abstract. This article examines the effectiveness of using case methods and simulations in a university environment with the aim of developing the socio-linguistic competence of students. Taking into account the diversity of cultures and linguistic groups in the modern world, socio-linguistic competence is becoming an important aspect of the training of future specialists. The article discusses the concept of socio-linguistic competence, its significance for professional development, and substantiates the need to introduce innovative teaching methods, such as case methods and simulations, for the effective development of this competence.

Key words: Socio-linguistic competence, Case methods, Simulations, University education, Communication skills, Intercultural interaction, Teaching

methods, Interdisciplinarity, Professional training, Students, Educational process.

Введение Современное образование сталкивается с вызовами глобализации, мультикультурности и межкультурного взаимодействия, которые требуют от обучающихся не только знания в своей профессиональной области, но и развитие широких коммуникативных компетенций. В этом контексте социолингвистическая компетенция, то есть умение эффективно взаимодействовать в разнообразных социокультурных контекстах, играет ключевую роль в формировании компетентных специалистов. Социолингвистическая компетенция не ограничивается просто владением языком, она включает в себя понимание культурных особенностей, норм и ценностей, умение адаптироваться к различным общностям и эффективно коммуницировать в контексте мультиязычного и мультикультурного общества. Активное внедрение социолингвистических компетенций в образовательный процесс вузов является ключевым шагом к подготовке гибких, адаптивных специалистов, способных успешно функционировать в разнообразном и динамичном мире сегодняшних реалий.

Описание кейс-методов и их роль в образовании: Кейс-методы представляют собой педагогический подход, основанный на использовании реальных ситуаций из практики для обучения студентов. Кейсы представляют собой описания конкретных проблем или ситуаций, с которыми сталкиваются специалисты в своей профессиональной деятельности. Студентам предлагается анализировать эти кейсы, выявлять проблемы, предлагать решения и обосновывать свои выводы.

Роль кейс-методов в образовании заключается в том, что они способствуют развитию аналитических и принятия решений навыков, умению работать в команде, критическому мышлению и самостоятельной работе студентов. Кейсы позволяют студентам переносить теоретические знания в реальные ситуации, развивая практическое мышление и умение применять полученные знания на практике.

Преимущества применения кейс-методов для развития социолингвистической компетенции:

1. Межкультурное понимание: Кейс-методы позволяют студентам погружаться в разнообразные культурные сценарии и ситуации, что способствует развитию понимания различий в межкультурном общении и адаптации к ним.

2. Коммуникативные навыки: Анализ кейсов требует от студентов эффективного общения, дискуссий и аргументации своих точек зрения, что способствует развитию коммуникативных навыков.

3. Развитие эмпатии и уважения: Изучение кейсов помогает студентам почувствовать эмоциональные аспекты общения и развить уважение к различным культурам и точкам зрения.

4. Применение в реальном времени: Работа с кейсами позволяет студентам испытать свои знания в реальном времени, что улучшает их умение реагировать на различные ситуации и принимать обоснованные решения.

Понятие симуляций и их применение в образовательном процессе

Симуляции представляют собой метод обучения, который имитирует реальные ситуации или процессы, позволяя студентам вживаться в определенные роли, принимать решения и решать задачи, основываясь на своих знаниях и навыках. Этот метод часто используется для тренировки навыков принятия решений, коммуникации, анализа и решения проблем в контролируемой среде.

Применение симуляций в образовательном процессе позволяет студентам:

1. Получить практический опыт: Симуляции позволяют студентам испытать реалистичные ситуации и события, которые могут возникнуть в реальной жизни, что помогает им освоить навыки работы в условиях ограниченности времени и ресурсов.

2. Развить критическое мышление: Работа в симуляциях требует от студентов анализа информации, принятия обоснованных решений и оценки последствий своих действий, что способствует развитию критического мышления.

3. Улучшить коммуникативные навыки: В процессе симуляций студенты вынуждены эффективно общаться, убеждать, учитывать точки зрения других участников, что способствует развитию коммуникативных навыков.

4. Повысить уровень адаптации и гибкости: Работа в симуляциях требует быстрой адаптации к изменяющимся обстоятельствам и поиска альтернативных стратегий, что помогает студентам развивать умение оперативно реагировать на новые ситуации.

Заключение:

Исследование роли кейс-методов и симуляций в развитии социолингвистической компетенции в учебном процессе позволило выявить их значимость для успешного формирования не только языковых навыков, но и умений эффективного общения в многоязычной и мультикультурной среде. Кейс-методы и симуляции способствуют не только углубленному пониманию теоретических аспектов предмета, но и практическому применению полученных знаний в реальных ситуациях, что существенно обогащает образовательный процесс.

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Ли Хао
студент магистратуры
Московский педагогический государственный университет
КНР, г.Москва

ВЛИЯНИЕ ЦИФРОВИЗАЦИИ НА РАЗВИТИЕ МЕЖДУНАРОДНОЙ ЭКОНОМИКИ

Аннотация. В этой статье рассматривается комплексное влияние цифровизации на международную экономику и глобальные экономические связи. Особое внимание уделяется следующим сферам: динамике международного обмена, включая товары, услуги, капитал и информацию, а также взаимосвязи развития национальных экономик в рамках глобальной системы.

Ключевые слова: цифровизация, мировая экономика, динамика, рост, глобальные экономические связи.

Li Hao
master's student
Moscow Pedagogical State University
China, Moscow

THE IMPACT OF DIGITIZATION ON THE DEVELOPMENT OF WORLD ECONOMY

Abstract. This article examines the complex impact of digitalization on the international economy and global economic relations. Particular attention is paid to the following areas: the dynamics of international exchange, including goods, services, capital and information, as well as the relationship between the development of national economies within the global system.

Key words: digitalization, world economy, dynamics, growth, global economic relations.

За последнее десятилетие в качестве объекта научных дискуссий во всем мире рассматриваются технологии цифровизации и их воздействие на развитие экономических и социальных процессов в обществе. Многие исследователи сходятся во мнении, что цифровизация стала обыденной реальностью, изменив способы управления производственными и социальными аспектами жизни¹⁵⁶. Однако мнения о том, когда именно

¹⁵⁶Платонова Е.Д. Цифровизация сферы услуг и экономика совместного потребления: о современных направлениях исследования // Финансовая экономика. 2019 №1.с.641-646

началась эта эра цифровой трансформации и каков ее вклад в разные сектора экономики разнятся.

Для массового понимания вопроса эксперты одного из ведущих информационных каналов в США CNBC (Consumer News and Business Channel) предложили поэтапное развитие цифровизации, разделив ее на два периода (первый этап – 1980-2010 гг., второй этап - с 2010-е гг. по настоящее время)¹⁵⁷.

Аналитические эксперты приравнивают концепцию цифровизации к фундаментальной технологии, которая способна запустить новую волну промышленных изменений. Паровые машины стали толчком к первой промышленной революции в XVIII-XIX вв. Позже, к концу XIX в, появление конвейерных линий привело ко второму крупному прорыву в промышленности. С приходом 1980-х, мир вступил в эпоху третьей промышленной революции благодаря наступлению эры персональных компьютеров и развитию интернет-технологий.

В 2016 г. немецкий экономист Клаус Шваб опубликовал книгу «Четвертая промышленная революция» (Индустрия 4.0), в которой он рассмотрел специфику нового этапа цифровизации, а именно: 1) использование принципиально новых технологий для хранения больших объемов данных; 2) беспроводная технология передачи информации 5G; 3) внедрение искусственного интеллекта в процессы обработки данных; 4) интеграция физической, цифровой и биологической сфер жизнедеятельности человека.¹⁵⁸

Такие современные цифровые технологии по большей части вносят изменения в сферу Интернета и телекоммуникаций, в досуговую сферу, в логистику, хранение данных, программирование, оформление документов, административные услуги, в сферу торговли, медицинских и образовательных услуг. Соответственно, встает необходимость рассмотреть влияние цифровизации на развитие международных экономических отношений. Современные исследования сфокусированы на том, как цифровизация переосмысливает управленческие практики внутри организаций, воздействует на отдельные отрасли и влияет на прогресс социальных и экономических структур различных стран. Несмотря на это, в качестве основного направления выступает изучение роли цифровых инноваций в эволюции международных экономических связей.

Мировое хозяйство – это совокупность экономик разных стран, ведущих взаимовыгодное сотрудничество через создание и поддержание экономических связей между странами и базирующееся на принципах разделения труда. Это создает прекрасную почву для всей экономики мира. Международные экономические отношения (МЭО) охватывают глобальную торговлю продуктами и услугами, обмен технологиями на

157 Consumer News and Business Channel. URL: <https://www.cnbc.com/world/?region=world>

158 Шваб К. Четвертая промышленная революция. М.: ООО «Издательство «Э», 2016.

международном уровне, перемещение капитала и трудовых ресурсов, а также работу международной валютно-финансовой инфраструктуры и региональных интеграционных объединений.

Первые три волны индустриальных революций сопровождались бурным ростом международных экономических отношений. Кульминацией МЭО общепринято считать экономическую глобализацию, которая получила бурное развитие, опираясь на информационные и цифровые технологии конца XX - начала XXI вв¹⁵⁹.

Воздействие цифровизации на развитие мировой экономики и международных экономических отношений следует рассматривать в двух областях исследования: как динамический процесс международного обмена (товарами, услугами, капиталом, трудовыми ресурсами и информацией) и как процесс развития совокупности национальных экономик мирового хозяйства. Помимо выдвинутых гипотез авторы данной статьи анализировали и обобщали имеющиеся результаты исследований авторитетных изданий (McKinsey, PWC, UNCTAD и др.), обрабатывали первичные статистические данные и формировали иллюстрационные материалы как доказательную базу.

Цифровизация подразумевает применение прорывных технологий, трансформирующих операционные модели и мировую экономику в целом за счет замещения или дополнения человека на базе использования продвинутой аналитики, искусственного интеллекта, мобильных устройств, роботизации и интеграционных технологических платформ, передовых стандартов связи.

В 2015 году глобальная консультационная компания McKinsey представила исследование «Global Flows in a Digital Age»¹⁶⁰. Авторами было проведено обновление статистической информации и выяснено следующее:

- темпы роста мирового экспорта товаров значительно замедлились и составили отрицательное среднегодовое значение;
- сократились средние темпы роста экспорта услуг, экспорта капитала (включая прямые иностранных инвестиции, портфельные инвестиции и прочие инвестиции (кредиты));
- сократился среднегодовой поток мигрантов;
- самые высокие средние темпы роста отмечены в обмене информационными потоками.

Рост доли экспорта услуг, связанных с цифровыми технологиями, говорит о цифровизации сектора услуг мирового хозяйства. Однако, цифровизация не является фактором роста международной торговли услугами – за последние 4 года наблюдается флатовый тренд.

159 Мальцев А.Ю. Цифровая экономика // Экономика и социум. 2018. №1 (44). С. 516-518.

160 Global Flows in a Digital Age. URL: <https://www.mckinsey.com/capabilities/strategy-and-corporate-finance/our-insights/global-flows-in-a-digital-age>

Доля товаров ИКТ (товаров информационно-коммуникационных технологий) в мировом экспорте товаров стабильна и варьируется от 10,5% до 12,9%¹⁶¹.

Цифровизация финансовых расчетов, торговли ценными бумагами еще больше укрепляет взаимозависимость финансовых рынков разных стран, а, следовательно, усиливает системные риски. Технологии цифровизации предложили новый продукт для международной валютно-финансовой системы – криптовалюты, однако, большинство финансовых экспертов публично не подтверждают свою заинтересованность в использовании данного инструмента в своих инвестиционных портфелях.

Эксперты ЮНКТАД опубликовали специальный отчет, посвященный влиянию цифровой экономики на международные инвестиции. Внутри группы высокотехнологических МНК эксперты выделяют цифровые МНК и МНК, связанные с информационно-коммуникационными технологиями. Цифровые МНК формируют около 70% своих общих продаж за рубежом, однако, только 40% их активов базируются за пределами их родных стран. Таким образом, можно заключить – цифровизация экономики не способствует расширению активов транснационального бизнеса. Всего 55% всех дочерних компаний и филиалов, принадлежащих цифровым МНК, базируются за рубежом. У МНК из других отраслей, не связанных напрямую с цифровыми технологиями, доля иностранных филиалов 78%¹⁶².

Примером сокращения капиталовложений в развитие традиционных форматов бизнеса являются тенденции развития розничной торговли. Международная консалтинговая компания Boston Consulting Group представила анализ вызовов цифровизации в розничной торговле. По мнению экспертов BCG, первая волна вызовов, воздействующая на ландшафт розничной торговли, - это появление on-line магазинов, продающих книги, диски, небольшие компьютерные комплектующие (начало 2000-х гг.). Вторая волна (середина 2000-х гг.) – расширение ассортимента on-line продаж (одежда, обувь, крупная бытовая техника). Третья волна (начало 2010-х гг.) – создание больших on-line платформ (Amazon, Ebay, Taobao, Ozon), где широта ассортимента позволяет конкурировать с традиционными розничными мега сетями (такими как Walmart)¹⁶³. В период третьей волны происходят поглощения и консолидации как внутри on-line торговли, так и между традиционными и on-line ритейлерами. В настоящее время компании розничной торговли переживают последствия третьей волны.

161 Матыцина Н. П., Жилияков А.Д. Цифровая экономика – экономика будущего // Символ науки. 2023. №6-2. С. 48-50.

162 Жилиева О.А. Цифровая экономика – экономика данных // Современные социальные и экономические процессы: проблемы, тенденции, перспективы регионального развития. 2023. №1. С. 32-34.

163 Аллеков А.Б., Гурбанов Д.А. Цифровая экономика // Символ науки. 2023. №4-2. С. 69-71.

Проанализировав динамику развития международных потоков товаров, услуг, капитала во взаимосвязи с процессами цифровизации, можно сделать следующие выводы:

- цифровизация в ее новом проявлении технических решений Индустрии 4.0 не является драйвером роста международных процессов обмена продукцией реальной экономики (физической продукцией);

- новый этап цифровизации экономики приведет к трансформации конкурентной среды некоторых высокотехнологических компаний сферы услуг, а именно: компаний из сферы Интернет-торговли, информационно-коммуникационных компаний, провайдеров связи;

- достижения новых цифровых технологий в ограниченном масштабе повысят международные контакты узкоспециализированных профессионалов в сфере медицины, образования, фундаментальной и прикладной науки;

- цифровизация и развитие виртуальной экономики обеспечат новые вызовы традиционным отраслям (необходимость переквалификации, диверсификации и/или трансформации бизнес-стратегий).

Цифровизация и связанные с ней технологии роботизации, искусственного интеллекта вызывают недоверие у большинства населения и повышенное чувство тревоги. В подтверждение тому McKinsey Global Institute приводит результаты недавно проведенного исследования:

Население видит позитивные перспективы развития вследствие цифровизации в таких областях как: здравоохранение, образование, защита экологии, развитие социальной активности и вовлеченности в процессы управления обществом.

Вместе с тем население опасается дальнейшего роста безработицы, ухудшения материальных условий жизни, снижения доверия к обществу из-за сокращения физического общения, замыкания на виртуальном пространстве.

Анализируя долю цифровой экономики в ВВП разных стран, авторы пришли к выводу о том, что Россия до сих пор не входит в группу стран-лидеров, активно развивающих цифровую экономику¹⁶⁴.

Однако у России есть значительные предпосылки для реализации цифрового потенциала и ускорения процессов цифровизации. Россия занимает второе место в мире по доступности услуг сотовой связи и десятое место в мире по доступности широкополосного доступа. Вместе с тем наблюдаются проблемы со своевременным освоением технологий Индустрии 4.0 (промышленный интернет вещей, 3D-печать, виртуальная реальность, продвинутая роботизация), массовой переподготовкой персонала и развитием научно-исследовательских центров.

164 Сударушкина И.В., Стефанова Н.А. Цифровая экономика // АНИ: экономика и управление. 2017. №1 (18). С. 188-184. (дата обращения: 30.04.2024).

Цифровизация бесспорно заставит развиваться национальные институты стран в направлении большей прозрачности, вместе с тем, фундаментальные факторы развития реальной, а не виртуальной экономики будут определять тенденции развития МЭО.

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Ли Хао
студент магистратуры
Московский педагогический государственный университет
КНР, г.Москва

ПОИСК НОВЫХ РЫНКОВ И ПАРТНЕРОВ ДЛЯ РАСШИРЕНИЯ МЕЖДУНАРОДНОГО ПРИСУТСТВИЯ ФАКТОРИНГОВЫХ КОМПАНИЙ

Аннотация. Данная статья рассматривает стратегии и тактики поиска новых рынков и партнеров для расширения международного влияния факторинговых компаний. Анализируется текущее положение российского сектора малого и среднего бизнеса (МСП) в контексте внешнеторговой активности и экспортных операций.

Ключевые слова: факторинг, партнеры, бизнес, внешняя торговля.

Li Hao
master's student
Moscow Pedagogical State University
China, Moscow

SEARCHING FOR NEW MARKETS AND PARTNERS TO EXPAND THE INTERNATIONAL PRESENCE OF FACTORING COMPANIES

Abstract. This article examines strategies and tactics for finding new markets and partners to expand the international influence of factoring companies. The current situation in the Russian small and medium-sized business (SME) sector is analyzed in the context of foreign trade activity and export operations.

Key words: factoring, partners, business, foreign trade.

Существующая необходимость решения разнообразных задач и стремление к улучшению расчетных отношений для бизнеса приводят к необходимости найти такой инструмент, который облегчил бы процесс выхода на новые рынки, уменьшив при этом затраты и риски, а также поддерживал более свободные и открытые отношения с бизнес-партнерами. В таком контексте, факторинг является хорошим вариантом решения. По большому счету, факторинг – это объединение следующих сервисов:

– револьверное беззалоговое финансирование уступленных клиентом фактору и неоплаченных дебитором денежных требований, возникающих между контрагентами в процессе реализации товаров и услуг на условиях отсрочки платежа;

- покрытие рисков, связанных с торговой деятельностью;
- административное управление дебиторской задолженностью¹⁶⁵.

Подойдя к вопросу с трех сторон, использования факторинга идет на пользу всем участникам процесса, давая и импортерам, и экспортерам уверенность в надежности и правильности таких взаимоотношений. Так, в зависимости от того импорт это или экспорт, с помощью данного финансового инструмента формируются соответствующие решения задач. Далее на примерах опишем действие схем международного факторинга и какие проблемы при этом решаются.

В условиях сегодняшней интенсивной конкуренции, особенно на рынках продажи товаров, поставщики вынуждены применять различные стратегии, для привлечения клиентов и удержания их интереса:

- минимизирование цен;
- создание бесплатной доставки товара;
- предоставление бонусов;
- диверсификация товарной номенклатуры и т. п.

Отсрочка платежа выступает ключевым инструментом в бизнесе, особенно для малого и среднего предприятия (МСП), так как предоставление товарного кредита зачастую важнее и проще для них, по сравнению с получением банковского кредита. Однако, в результате предоставления кредитов своим покупателям, поставщики могут столкнуться с нехваткой рабочего капитала и проблемами в денежном потоке. Вместе с этим также увеличивается риск задержек в оплате или частичной неоплаты со стороны покупателей, что может привести к дополнительным рискам и финансовым потерям для поставщика. Включение в торговую операцию экспортного факторинга решает целый ряд проблем.

Факторинговое финансирование, осуществляемое сразу после отгрузки товара в размере до 90 % от суммы поставки, дает возможность участникам экспорта давать своим иностранным покупателям отсрочку платежа, не беспокоясь о собственной ликвидности (которая в предприятиях малого и среднего отечественного бизнеса является низкой в связи с высокой долей дебиторской задолженности в структуре оборотных активов). Более того, если вновь обратиться к функционалу, взаимодействуя с факторинговой компанией клиент получает профессионального экспортного менеджера, который производит анализ и проверку зарубежных партнеров; контролирует ход сделок; защищает интересы клиента при оформлении всей документации, связанной с доставкой товара за рубеж и вручением его покупателю.

Таким образом, обеспечивается максимальная защита от рисков неплатежа со стороны контрагента.

¹⁶⁵ Лукьянова М.Т., Ковшов В.А. Факторинг как инструмент управления финансовыми ресурсами // Азимут научных исследований: экономика и управление. 2023, № 1(43). С. 67-70.

В действительности, использование факторинга в качестве финансового инструмента открывает перед поставщиками совершенно новые горизонты для роста и развития бизнеса по сравнению с возможностями, доступными компаниям, управляющим товарным кредитом самостоятельно.

В случае экспортных операций поставщику необходимо идти на уступки покупателю, однако в случае импортных операций ситуация полностью противоположная. В таком случае, главным является поставщик и именно он диктует свои условия, так как заинтересован в предоплате. Для получения товарного кредита, покупателю нужно показать свою надежность и платежеспособность. Это весьма сложная задача для отечественных импортеров.

Первым аспектом, интересующим иностранных поставщиков при анализе финансовой надежности, становится кредитный рейтинг страны, из которой происходит импорт¹⁶⁶. Высокий кредитный рейтинг страны способствует усилению доверия к компаниям-покупателям и увеличивает их шансы на одобрение товарных кредитов. В условиях международного экономического кризиса и серьезного ухудшения конъюнктуры некоторых рынков – особенно сырьевых (учитывая, что сырьевые отрасли обеспечивают значительную часть ВВП России), риск недоверия к платежеспособности отечественных покупателей является актуальным. Основываясь на этом, иностранные поставщики в торговых отношениях с российскими партнерами чаще стали требовать гарантийное покрытие либо предоплату, особенно актуально это на первоначальном этапе сотрудничества. Несмотря на то, что поставка может превосходить 45-дневный срок. Соответственно, до принятия товара, возникает необходимость в оплате следующей партии.

Используя импортный факторинг, импортер может договориться об отсрочке платежа при сделках с иностранным поставщиком. В рамках этой модели факторинговая компания берет на себя роль поручителя за выполнение импортером своих финансовых обязательств перед экспортером в срок и в полном объеме за полученные товары. Время на отсрочку отплаты позволяет реализовать поставку и к моменту оплаты иметь необходимые для нее финансовые средства.

Стоит отметить, что даже на федеральном уровне преимущества факторинга были неоднократно отмечены. В государственной программе финансовой поддержки МСП факторинг является важным инструментом финансовой поддержки для малого бизнеса. На текущий момент более, чем

166 Корзоватых Ж.М. Применение электронного факторинга субъектами малого и среднего предпринимательства // Вестник УРАО. 2022. №3. С. 124-131.

1 500 организаций получают финансы для пополнения оборотного капитала от государства через факторинговые организации¹⁶⁷.

В России доля использования международного факторинга в общем объеме предоставляемых факторинговых услуг занимает менее одного процента. Потенциал развития этого сегмента рынка тесно связан с особенностями и активностью внешнеэкономической торговли. Несмотря на то, что факторинг применим в любой отрасли, в которой предусмотрена отсрочка оплаты, особенно он распространен среди товарных категорий, предназначенных для непосредственного потребления.

Соответственно, в данный момент только 0,03 % от общего объема торговых поставок было обслужено российскими факторинговыми организациями, что дает нам понять, что существенная часть рынка не освоена. В последнее время отмечается устойчивый рост объемов импортного факторинга, что показывает возрастающий интерес к этому финансовому инструменту как способу управления рисками и обеспечению гарантий поставок в Россию. Более того, для факторинга подходит сама структура отечественного импорта.

Кроме выделенных плюсов экспортного факторинга, для его развития в нашей стране есть следующие трудности в области валютного законодательства; а также негласная конкуренция с другими финансовыми продуктами, использующимися в экспортно-импортных операциях.

В то время как проблему конкуренции можно решить за счет эффективных стратегий популяризации и маркетинга, иницируемых самими факторинговыми компаниями, проблему законодательства необходимо разрешать путем реформирования нормативных актов. В России отсутствует четкое регулирование процесса перечисления платежей факторинговым компаниям от зарубежных клиентов, права на денежные требования к которым были переданы экспортером, с учетом требований по возвращению валютной выручки в страну. В частности, согласно российскому законодательству поставщик (экспортер) обязан обеспечить получение от нерезидента (покупателя) на свой банковский счет валютной выручки за поставленный товар. Получается, что работать по стандартной схеме факторинга экспортер не может, так как переуступив права денежного требования факторинговой компании, он получает деньги от резидента (российского фактора), что в корне противоречит законодательству. В итоге факторинговые компании вынуждены работать по схеме конфиденциального факторинга, когда денежные средства поступают на счет экспортера, минуя факторинговый счет. Это увеличивает риски фактора. Или ему самому приходится разрабатывать иные схемы взаимодействия. Одновременно с этим сложной является сама процедура

167 Годунов П.А. Проблемы реформирования договора факторинга в России // Вестник науки. 2022. №2 (47). С. 76-87.

уступки денежного требования, номинированного в иностранной валюте, учитывая необходимость оформления паспорта сделки.

Оценивая валютное регулирование, можно сделать вывод, что с одной стороны, существующее законодательство становится преградой на пути развития международного факторинга по причине указанных трудностей¹⁶⁸. С другой стороны, оно способствует формированию спроса на факторинг как на эффективный инструмент влияния на дебиторов и их дисциплинирование.

На сегодняшний день, российская отрасль международного факторинга только развивается. В дальнейшем нужно будет провести еще много работы над его становлением для того, чтобы он заслуженно занял свою нишу на рынке финансовых услуг. Тем более, что предпосылки для этого есть. Уже очевидно, что международный факторинг стал не просто одним из современных инструментов торгового финансирования, а реальной услугой, способной оказать существенное влияние на развитие международной торговли, в особенности в секторе МСП.

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¹⁶⁸ Годунов П.А. Проблемы реформирования договора факторинга в России // Вестник науки. 2022. №2 (47). С. 76-87.

Ли Хао
студент магистратуры
Московский педагогический государственный университет
КНР, г.Москва

СОВРЕМЕННЫЕ ТРЕНДЫ И ВЫЗОВЫ, СТОЯЩИЕ ПЕРЕД ФАКТОРИНГОМ В МЕЖДУНАРОДНОМ БИЗНЕСЕ

Аннотация. Статья посвящена современным трендам и проблемам, встречающимся на пути развития факторинга как важного инструмента в международном бизнесе. Эволюция факторинга рассматривается от исторических корней до его текущего положения в глобальной финансовой системе, а также особенности применения факторинга в современной экономической практике.

Ключевые слова: факторинг, международный бизнес, глобальная финансовая система.

Li Hao
master's student
Moscow Pedagogical State University
China, Moscow

MODERN TRENDS AND CHALLENGES FACING FACTORING IN INTERNATIONAL BUSINESS

Abstract. The article has devoted the modern trends and problems encountered in the development of factoring as an important tool in international business. The evolution of factoring is considered from its historical roots to its current position in the global financial system, as well as the features of the use of factoring in modern economic practice.

Key words: factoring, international business, global financial system.

Изначально факторинг использовался специализированными торговыми посредниками, в том числе, банками.

По прошествии времени этот финансовый инструмент успешно развивался и получил популярность в мировой экономике. В современном мире с учетом текущей экономической ситуации для инновационных компаний характерно непрерывное развитие, поиск новшеств и улучшение экономической устойчивости.

Для малого и среднего бизнеса факторинг полезен для урегулирования проблем с задолженностью. На сегодня внедрение

факторинга в малый бизнес является актуальным для российских компаний, так как он позволяет увеличить оборотные средства без глобального изменения текущих процессов при использовании его в расчетах с контрагентами. Факторинг сегодня является эффективным инструментом для улучшения финансовых взаимодействий в мировой торговле.

Со временем факторинг успешно развивается и его качество постепенно улучшается. Соответственно, сегодня мы можем считать его полноценным обязательным инструментом для малого и среднего бизнеса, так как он берет на себя большинство финансовых задач¹⁶⁹. Это помогает высвободить ресурсы для развития компании и решения других финансовых вопросов. Кроме того, применение факторинга снижает финансовые расходы на специальный финансовый отдел с сотрудниками, путем передачи этих задач на аутсорсинг. Коммерческие банки, предоставляющие услуги в этой области закрывают клиентам большой перечень трудных вопросов финансирования деятельности¹⁷⁰.

Особенно удобно использование услуг при недостаточно большом финансовом оборотном капитале, когда невозможности взять кредит, а неплатежи контрагентов возрастают. В первую очередь нужно отметить простоту использования факторинга для всех участников процесса. Поставщик (кредитор) получает ускорение капиталоборота, так как платежи поступают в срок даже при финансовых затруднениях покупателя (должника). Такая схема выгодна и для покупателя, поскольку она позволяет ему получить товар, проверить его соответствие заявленным характеристикам и условиям заказа, до того, как осуществлен платеж¹⁷¹. Значительно быстрее происходит оборот средств при взаиморасчетах сторон, улучшается структура баланса, а риск возникновения долгов сводится к минимальному.

Такая услуга не требует обеспечения, чем выгодно отличается от кредита. Поставщик на постоянной основе получает бессрочное финансирование, так как договор факторинга заключается на короткий срок. Таким образом, поставщик способен, минимально рискуя, в быстром темпе заметно увеличить объемы производства. Задолженность погашается дебиторам, в то время как поставщик получает финансовые средства за проданные товары (услуги) или оказанные работы в кратчайшие сроки.

На сегодняшний день, услуги факторинга перестав быть побочным продуктом постепенно обретают статус независимой отрасли. Эта отрасль стремительно развивается в России и в мире, показывая отличные перспективы. Портфель российского рынка факторинга на 01.01.2024

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170 Жарикова К.В., Примакова Е.М., Сушкова М.А., Тюрина А.В. Факторинг в России // Экономика и социум. 2016. №3 (22). С. 417-422.

171 Чупрова В.Н. Мероприятия по уменьшению дебиторской задолженности предприятия с применением факторинга // Вестник науки. 2024. №2 (71). С. 123-126.

составил 2 трлн 257 млрд рублей. По сравнению с 01.01.2023 портфель рынка вырос на 57% (+822 млрд руб.), по сравнению с 01.10.2023 - на 26% (+466 млрд руб.). Средняя оборачиваемость по портфелю составила 64 дня (год назад - 62) при минимуме 35 дней и максимуме 102 дня. В структуре портфеля доля активов без права регресса за год выросла на 3 процентных пункта до 84,7%, доля активов с правом регресса за год снизилась на ту же величину до 13,4%, доля активов по международным сделкам выросла на 0,1 пп до 1,9 %¹⁷².

Объем выплаченного финансирования за 2023 год составил 7 трлн 730 млрд рублей. По сравнению с 2022 годом объем финансирования, направленного факторами клиентам, вырос на 33% или 1,9 трлн рублей. В 4 квартале 2023 года факторы выплатили клиентам около 2,5 трлн рублей. В структуре выплаченного финансирования за 12 месяцев доля сделок без регресса составила 81,4% (-0,2 пп год-к-году), с регрессом 17,1% (-0,5 пп год-к-году), доля международных сделок 1,5% (+0,7 пп год-к-году)¹⁷³.

Значительное увеличение интереса к факторингу обусловлено его доступностью как формы финансирования для множества малых и средних предприятий, он не требует залога, в отличие от традиционных банковских кредитов. Сегодня во всем мире существует тенденция на расширение спроса на факторинговые услуги у клиентов, и на предложения от работников банковской сферы. Потребность в факторинге испытывают практически все компании, постоянно работающие на условиях отсрочки платежа. В качестве примера мы можем рассмотреть субъекты пищевой, фармацевтической, легкой, нефтеперерабатывающей, и автомобильной промышленности.

Наибольшей популярностью в России пользуется факторинг с регрессом. Ее плюс для клиента в том, что неплатеж дебитора редкое явление, за счет давления со стороны кредитора и фактора. Выгода заключается в том, что цена его ниже, чем стоимость того, при котором все риски на себя принимает факторинговая компания.

За несколько лет в области факторинга были замечены некоторые изменения. Это связано с дефицитом ликвидности, снижение кредитоспособности предприятий и покупателей, увеличение стоимости денежных ресурсов, рост объема просроченной задолженности.

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¹⁷² РЫНОК ФАКТОРИНГА РОССИИ по итогам 2023 года. Москва. Февраль 2024 URL: https://asfact.ru/wp-content/uploads/afc-y2023_open_upd.pdf

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*Магарян С.А.
студент 2 курс
группа РЕГ - 822
Институт магистратуры
ФГБОУ ВО РГЭУ (РИНХ)
Россия, г.Ростов-на-Дону*

КОНЦЕПЦИЯ УСТОЙЧИВОГО РАЗВИТИЯ: ЭВОЛЮЦИЯ И СОВРЕМЕННОЕ ВИДЕНИЕ

Аннотация. Статья посвящена эволюции концепции устойчивого развития от первоначального акцента на экологическом измерении экономического роста к современному пониманию, изложенному в семнадцати целях устойчивого развития. В данной статье предпринята попытка получить целостное представление о трансформации научных подходов к решению проблем устойчивого развития на разных временных этапах, а также теоретически обосновать ключевые положения концепции устойчивого развития в контексте актуальных глобальных трендов.

Ключевые слова: устойчивое развитие, экономический рост, климат, социальное неравенство.

*Magarian S.A.
graduate student
2 year, gr. REG-822
Rostov State Economic University
Russian Federation, Rostov-on-Don*

CONCEPT OF SUSTAINABLE DEVELOPMENT: EVOLUTION AND MODERN VISION

Annotation. The article is devoted to the evolution of the concept of sustainable development from the initial emphasis on the environmental dimension of economic growth to the modern understanding set out in the seventeen sustainable development goals. This article makes an attempt to obtain a holistic understanding of the transformation of scientific approaches to solving problems of sustainable development at different time stages, as well as to theoretically substantiate the key provisions of the concept of sustainable development in the context of current global trends.

Key words: sustainable development, economic growth, climate, social inequality.

Концепция устойчивого развития приобретает все большее значение при формировании экологической политики во всем мире. Устойчивое развитие означает удовлетворение потребностей настоящего времени без ущерба для способности будущих поколений удовлетворять свои собственные потребности. Данная концепция признает взаимозависимость экономических, социальных и экологических проблем и подчеркивает необходимость установления баланса между ними. Экологическая политика, основанная на устойчивом развитии, направлена на содействие экономическому росту и социальному прогрессу при одновременной защите окружающей среды и предполагает эффективное использование ресурсов, сокращение отходов и загрязнения окружающей среды, а также сохранение природных экосистем. Также, это означает удовлетворение потребностей, находящихся в неблагоприятном положении групп населения и содействие справедливому доступу к природным ресурсам.

Концепция устойчивого развития получила свое первое крупное международное признание в 1972 году на Конференции ООН по окружающей человека среде, проходившей в Стокгольме. Этот термин прямо не упоминался, но, тем не менее, международное сообщество согласилось с концепцией, которая в настоящее время является основополагающей для устойчивого развития, - что как развитием, так и окружающей средой, которые до сих пор рассматривались как отдельные вопросы, можно управлять взаимовыгодным образом. Этот термин был популяризирован 15 лет спустя в докладе Всемирной комиссии по окружающей среде и развитию, которые обсуждались комиссией Брундтланда в докладе 1987 года «Наше общее будущее». Термин включал то, что считается классическим определением устойчивого развития: «развитие, которое удовлетворяет потребности настоящего, не ставя под угрозу способность будущих поколений удовлетворять свои собственные потребности»¹⁷⁴. Задачей доклада Брундтланда было исследование многочисленных проблем, которые поднимались в предыдущие десятилетия, а именно того, что человеческая деятельность оказывает серьезное и негативное воздействие на планету и что модели роста и развития будут неустойчивыми, если они будут продолжаться бесконтрольно. Ключевыми работами, которые высветили это мышление, были «Тихая весна» Рэйчел Карсон (1962), «Трагедия общин» Гаррета Хардина (1968), «План выживания» журнала «Эколог» (1972) и отчет Римского клуба «Пределы роста» (1972).

Концепция устойчивого развития легла в основу Конференции Организации Объединенных Наций по окружающей среде и развитию (ЮНСЕД), состоявшейся в Рио-де-Жанейро в 1992 году. «Саммит Земли» ознаменовал собой первую международную попытку разработать планы

¹⁷⁴Приложение к Резолюции от 38/161 от 19.12.1987 – доклад Всемирной комиссии по окружающей среде и развитию, «Наше общее будущее», 1987г. С. 24 – URL: <https://www.un.org/ru/ga/pdf/brundtland.pdf>

действий и стратегии для перехода к более устойчивой модели развития¹⁷⁵. В нем приняли участие более 100 глав государств и представителей 179 национальных правительств. На саммите также присутствовали дипломаты, ученые, представители СМИ и неправительственных организаций (НПО) из 179 стран для масштабных усилий по рассмотрению влияния социально-экономической деятельности человека на окружающую среду.

Одним из значимых событий также считается всемирный саммит по устойчивому развитию, который состоялся в 2002 году в Йоханнесбурге, Южной Африке. Саммит был представлен премьер-министром Норвегии Гру Харлем Брундтланд и стал логическим продолжением Конференции Организации Объединенных Наций по окружающей среде и развитию 1992 года. В мероприятии приняли участие 191 национальное правительство, учреждения ООН, многосторонние финансовые учреждения и другие основные группы для оценки прогресса, достигнутого после саммита в Бразилии. Йоханнесбургский саммит привел к трем ключевым результатам: политической декларации, Йоханнесбургскому плану выполнения решений и ряду партнерских инициатив. Ключевые обязательства включали обязательства по устойчивому потреблению и производству, водоснабжению и санитарии, а также энергетике.

Однако только на последних Всемирных саммитах по устойчивому развитию, в Рио-де-Жанейро 2012 года, который назывался «Рио+20», и в Нью-Йорке в 2015 году, ведущие мировые лидеры признали устойчивое развитие главной задачей, которой оно остается и сегодня. Целью саммита «Рио+20» было заручиться новой политической приверженностью устойчивому развитию и определить новые и нарождающиеся вызовы. Он также был сосредоточен на двух темах: «зеленая» экономика в контексте устойчивого развития и искоренение нищеты в рамках устойчивого развития. Итогом саммита «Рио+20» стало принятие документа «Будущее, которого мы хотим», в котором изложен ряд целей и задач в области устойчивого развития¹⁷⁶. Они включают в себя цель искоренения нищеты, поощрения устойчивых моделей потребления и производства, а также защиты природно-ресурсной базы экономического и социального развития и рационального использования этой базы.

На Саммите ООН по устойчивому развитию 2015 года были определены актуальные новые цели устойчивого развития¹⁷⁷. Цели были приняты в ходе переговорного процесса, в котором приняли участие 193 государства-члена ООН. Новые цели устойчивого развития имеют довольно

175 Рио-де-Жанейрская декларация по окружающей среде и развитию, «Саммит Земли», 1992 г – URL: <https://www.un.org/ru/ga/pdf/brundtland.pdf>

176 «Будущее, которого мы хотим», Всемирный саммит по устойчивому развитию, «Рио+20». Рио-де-Жанейро, 2012г. – URL: <https://sustainabledevelopment.un.org/futurewewant.html>

177 Саммит по устойчивому развитию «Преобразование нашего мира в интересах людей и планеты». Нью-Йорк, 2015г.
– URL: <http://www.who.int/mediacentre/events/meetings/2015/un-sustainable-development-summit/ru>

широкую сферу охвата, так как в рамках целей рассмотрена взаимосвязь различных элементов концепции устойчивого развития: социальной интеграции, экономического роста и защиты окружающей среды¹⁷⁸. Одним из важнейших достижений Саммита стал доклад «Формирование глобального партнерства для достижения Целей развития тысячелетия»¹⁷⁹. Цели устойчивого развития, принятые ранее, были ориентированы на категорию развивающихся государств, в частности, на беднейшие страны, в то время как «нью-йоркские» цели ориентированы на весь мир. В то же время, цели затрагивают такие чрезвычайно острые проблемы, как: нищета, голод, образование, рациональное использование водных ресурсов, энергосбережение, экономический рост государств, борьба с изменением климата и другие.

Также, в 2015 году Организация Объединенных Наций провела 21-ю конференцию сторон (КС21) Рамочной конвенции Организации Объединенных Наций об изменении климата (РКИКООН) в Париже, которая стала значительным международным событием, связанным с устойчивым развитием. Парижское соглашение, которое было согласовано и принято в ходе COP21, является юридически обязательным соглашением между 196 странами об ограничении глобального потепления значительно ниже 2 градусов Цельсия по сравнению с доиндустриальным уровнем и о продолжении усилий по ограничению повышения температуры до 1,5 градусов Цельсия. Соглашение также включает положения, обязывающие страны регулярно отчитываться о своем прогрессе в сокращении выбросов парниковых газов и адаптации к последствиям изменения климата¹⁸⁰. Парижское соглашение важно, поскольку оно представляет собой глобальную приверженность решению насущной проблемы изменения климата. Последствия изменения климата, такие как повышение уровня моря, экстремальные погодные явления и утрата биоразнообразия, имеют далеко идущие и потенциально катастрофические последствия для человеческих обществ и экосистем. Парижское соглашение устанавливает рамки для совместной работы стран по сокращению выбросов парниковых газов и переходу к низкоуглеродному, устойчивому будущему. Многие страны серьезно отнеслись к Парижскому соглашению и взяли на себя значительные обязательства по сокращению своих выбросов парниковых газов. Однако одного соглашения недостаточно для достижения необходимого сокращения выбросов, чтобы ограничить глобальное потепление до 1,5 градусов Цельсия. Странам необходимо выполнить свои

178 «Цели в области устойчивого развития», ООН. [Электронный ресурс] – URL: <http://www.un.org/sustainabledevelopment/ru> (дата обращения 20.02.2024)

179 Саммит по устойчивому развитию 2015. Доклад «Формирование глобального партнерства для достижения Целей развития тысячелетия». Нью-Йорк, 2015г. – URL: <https://www.un.org/ru/millenniumgoals/mdgreport2015.pdf>

180 Рамочная конвенция об изменении климата (РКИК ООН). «Парижское соглашение». Париж, 2015 г. – URL: https://unfccc.int/files/meetings/paris_nov_2015/application/pdf/paris_agreement_russian_.pdf

обязательства и предпринять дополнительные действия для ускорения перехода к низкоуглеродной экономике.

В июле 2022 г. Организацией Объединенных Наций был опубликован доклад «Кризисы неравенства», в котором было указано, что «Экономическое и социальное неравенство — движущая сила неравенства политического». «Неравенство, разрушение окружающей среды и уязвимость человечества перед лицом кризисов — это не недостатки, а неотъемлемые черты существующей ныне глобальной экономической системы».¹⁸¹ Мировые социально-экономические потрясения и нарастающая напряженность усугубили кризис, приведя к резкому росту цен на продовольствие и энергетические ресурсы, нарушению цепочек поставок и глобальной торговли, потрясению финансовых рынков, создав угрозу глобальной продовольственной безопасности. Организация Объединенных Наций описывает данный процесс как глобальный трехмерный кризис (продовольственный, энергетический и финансовый), который оказал каскадное воздействие на мировую экономику.¹⁸²

Нарастание геополитических рисков и кризис системы международных отношений формирует новую реальность, которая характеризуется высокой неопределенностью, снижением мировой динамики экономического развития, значительным сужением горизонта планирования, изменением приоритетов в пользу краткосрочных социально-экономических задач.

На очередном этапе циклического экономического спада актуальность повестки устойчивого развития и принятые обязательства стран сохраняются, однако явной становится ориентация на экономический рост в количественной его составляющей, на основе интенсивного использования традиционных технических решений, снижаются стандарты экологического регулирования, финансовые инвестиции в человеческие ресурсы и зеленые проекты. Например, спровоцированный геополитическими разногласиями энергетический кризис в Европе заставил такие страны как Германия, Австрия, Болгария, Румыния и Италия, вопреки принципам зеленой экономики, расконсервировать собственные угольные шахты и вернуться к работе угольных ТЭЦ. Одновременно под нарастающим санкционным давлением в России происходит снижение экологического контроля в пользу сохранения экономики. Приоритеты устойчивого развития неизбежно будут трансформироваться с учетом новых обстоятельств и трендов, что обуславливает необходимость пересмотра большинства стратегий и программ устойчивого развития.

181 A Crisis Unequality. Switching power on New eco-social contract. URL: <https://cdn.unrisd.org/assets/library/reports/preview-unrisd-flagship-report-2022.pdf> (дата обращения: 27.02.2024).

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*Мадаминов А.А.
старший преподаватель
Международный институт пищевых технологий и инженерии
Республика Узбекистан, г. Фергана*

РОЛЬ ИННОВАЦИОННО-ТЕХНОЛОГИЧЕСКИХ СРЕДСТВ В ПРОЦЕССЕ КОММУНИКАЦИИ

Аннотация. В данной статье рассматриваются концептуальные подходы роли инновационно-технологических средств в процессе коммуникации.

Ключевые слова: технология, инновационные технологии, инновационно-технологические средства, масс-медиа, манипуляция.

*Madaminov A.A.
senior lecturer
International Institute of Food Technologies and Engineering
Republic of Uzbekistan, Fergana*

THE ROLE OF AND TECHNOLOGICAL MEANS IN THE PROCESS OF POLITICAL COMMUNICATION

Annotation. This article examines conceptual approaches to the role of innovative technological means in the process of communication.

Keywords: technology, innovative technologies, innovative technological means, mass media, manipulation.

Современное человечество находится в стадии фундаментальной трансформации, связанной с переходом от индустриального к постиндустриальному, информационному обществу. При этом, если в традиционном обществе господствовала философия отчужденности в отношениях между государственной властью и народом, то в эпоху модерна формируется принципиально новая философия – взаимной зависимости и партнерства между государственной властью и ее источником – народом.

Влияние инновационно-технологических средств на формирование общественного мнения – одна из самых главных составляющих общественного процесса. В связи с этим важно определить особенности воздействия инновационно-технологических средств, используемых субъектами общественного процесса, на формирование общественного мнения¹⁸³.

183 Ильина Л.Е., Королева-Конопляная Г.И. Политические технологии в современном обществе и гуманитарное образование //В сборнике: Современные проблемы науки и образования Материалы

Все современные инновационные технологии основываются на знаниях о человеке, его бытии и реализуются как системные интеллектуальные комплексы, направленные на манипулирование сознанием.

Таким образом, мы можем определить роль инновационно - технологических средств в процессе коммуникации, управляемую субъектами общественной деятельности с целью влияния на состояние объекта, которым выступает общественное мнение.

На специфические инновационно-технологические средства целенаправленного формирования общественного мнения во имя достижения общей цели и информационного влияния на поведение граждан обращал внимание, в своё время, Платон, предлагавший в своих теориях об идеальном государстве в воспитательных целях «переписать» мифы и устранить из них те места, в которых боги выглядят перед людьми в невыгодном свете¹⁸⁴.

Впервые обратил внимание на инновационно-технологические средства целенаправленного формирования общественного мнения Аристотель, интерпретируя общественную деятельность как «общение», которое направлено на то, чтобы достигнуть более высокого, «общего блага». В дальнейшем отдельные представления о средствах информационного влияния коммуникаций нашли отражение в творчестве Цицерона, который исследуя вопросы «общего правопорядка», обращал внимание на политическое общение.

Известные мыслители Средневековья Фома Аквинский и Августин Блаженный в своих трудах религиозно-философской направленности акцентировали внимание на различных видах человеческого взаимодействия и общения. В период Возрождения проблема влияния инновационно-технологических средств на общественное сознание народа, ориентированная на смену поведения и настроений людей нашла свое развитие в работах Н. Макиавелли.

Начиная с середины XIX в. некоторые аспекты использования инновационно-технологических средств формирования общественного мнения рассматривались в рамках марксистской концепции как форма выражения и продвижения определенных идей, убеждений, при этом, идеи господствующего класса рассматривались как господствующие идеи любого времени. В Новое время сформировались новые концептуальные подходы, касающиеся роли инновационно-технологических средств формирования общественного мнения в общественном процессе, которые оказывают значительное влияние и в настоящее время.

Международной (заочной) научно-практической конференции. Научно-издательский центр «Мир науки». 2019. С. 146-154.

184 Платон. Государство. // Платон. Филеб, Государство, Тимей, Критий. - М., 1999. С. 144.

В 50-х гг. были разработаны и принципиально другие концепции, которые ориентировались, напротив, на представления об активном поведении индивида под воздействием инновационно-технологических средств. К этим теориям относятся «теория удовлетворения потребностей и полезности», разработанная Э. Кацем и разработанная Л. Фестингером теория «когнитивного диссонанса».

Благодаря интенсивному распространению телевидения в конце 60-х – начало 70-х гг. XX в. заметно активизировались исследования, направленные на изучение влияния инновационно-технологических средств на ход избирательных кампаний и электоральное поведение.

Определенный интерес в анализе влияния инновационно-технологических средств на общественную идентификацию среди населения вызывают теоретические концепции, которые стремятся объяснить механизмы их социализирующего влияния на общество, а также дать оценку степени эффективности этого влияния. Это научное направление развивается в моделях, которые характеризуют влияние телевидения на поведение индивида. Представителями этого направления являются Дж. Гербнер, Дж. Комсток и др.

Инновационные технологии выступают как «методы решения общественных проблем, ее реализации, осуществления деятельности. Следовательно, в этом определении подчеркивается их деятельностный аспект. То есть инновационные технологии представляют собой совокупность методов и систем последовательных действий, направленных на достижение необходимого общественного результата.

Инновационные технологии представляют собой важнейшие составляющие жизнедеятельности социума. Они выступают как следствие рационализации и оптимизации функционирования общественной сферы общества по удовлетворению тех или иных его потребностей.

Обычно использование инновационных технологий ориентировано на изменение (преобразование) общественного контекста¹⁸⁵.

По смысловой нагрузке и механизмам реального действия инновационные технологии являются совокупностью определенных приемов, методов, последовательных шагов, которые обеспечивают достижение общественного результата. Техники могут использоваться в любой стране без существенных изменений, а технологии всегда являются специфическими, требуют адаптации к местным условиям.

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*Макаров А.А., канд. экон. наук
доцент
Московский гуманитарный университет
Россия, г.Москва
Институт искусств и информационных технологий
филиал СПбГУП
Паутова А.В., канд.с.-х. наук
доцент
Институт искусств и информационных технологий
Россия, Солнечногорский р-н Московской обл.*

ХАРАКТЕРИСТИКА ВОЗМОЖНОСТИ ПРИМЕНЕНИЯ К ДЕЯТЕЛЬНОСТИ «МАНУФАКТУРНОЙ КОМПАНИИ ЗИНГЕР» КОНЦЕПЦИЙ МАРКЕТИНГА: РЕТРОСПЕКТИВНЫЙ АНАЛИЗ

В публикации обобщен теоретический материал и обоснована возможность применения концепций маркетинга к деятельности ведущего машиностроительного предприятия начала XX в. («Мануфактурной компании Зингера»).

Ключевые слова: «Мануфактурная компания Зингер», аспекты ее деятельности в России, Подольск Московской губернии, концепции маркетинга, применение концепций маркетинга.

*Makarov A.A., candidate of economics
associate professor
Moscow University for the Humanities
Russia, Moscow
Institute of Arts and Information Technologies
Pautova A.V., candidate of agricultural sciences sciences
associate professor
Institute of Arts and Information Technology
Russia, Solnechnogorsk district of the Moscow region*

CHARACTERISTICS OF THE POSSIBILITY OF APPLYING MARKETING CONCEPTS TO THE ACTIVITIES OF THE SINGER MANUFACTURING COMPANY: RETROSPECTIVE ANALYSIS

The publication summarizes theoretical material and substantiates the possibility of applying marketing concepts to the activities of a leading machine-building enterprise of the early twentieth century.

Key words: "Singer Manufactory Company," aspects of its activities in Russia, Podolsk, Moscow province, marketing concepts, application of marketing concepts.

Общеизвестно, что становление маркетинга – как философии современного бизнеса – пришлось на начало XX в. И именно в это время, в России активизировалась деятельность «Мануфактурной компании Зингера», в основе успешности которой его практическое применение.

Изобретение в 1851 г. Айзеком Зингером базовых принципов работы швейных машин (движение иглы вверх – вниз, держатель иглы, доска-стол для ткани и ножной привод), упростило её механизм и сделало шитьё доступным в домашних условиях. В скором времени швейная машинка «Зингер» была практически в каждом доме, и её наличие из-за высокой стоимости (100 долл.) свидетельствовало о достатке семьи.

В России первые швейные машинки Зингер завозились из Германии дистрибьютором Георгом Нейдлингером. На промышленный подъем 1890-ых гг., создавший в России условия, необходимые для их массового производства, обратила внимание «Мануфактурная компания Зингер» (филиал корпорации). Она начала свою деятельность 19 июня 1897 г. после утверждения императором Николаем II её Устава. Купец Нейдлингер, американец Борн и англичанин Дуглас стали учредителями компании, которая ставила своей задачей «устройство и содержание заводов швейных, пишущих и земледельческих машин и орудий, велосипедов, паровых котлов и всякого рода электрических машин и аппаратов» [5].

Строительство завода было одной из главных целей деятельности компании, заинтересованной в увеличении продаж швейных машинок на российском рынке. В 1896 г. Нейдлингер рассмотрел девять участков, расположенных вдоль железных дорог, но они не подошли, так как находились в стороне от торговых путей. Одновременно он привлёк к поискам участка агентов-распространителей, один из которых предложил награду работникам железнодорожных станций за информацию о них. В Подольске Московской губернии начальник станции информировал о том, что город может продать под строительство завода землю вдоль железной дороги за низкую цену, учитывая потенциал увеличения занятости населения, торговли и перевозок. Идея строительства завода встретила поддержку у помощника губернатора и в городском совете.

Расположение участка было удобно для поставок запчастей с иностранных заводов корпорации и дальнейшей отправки продукции в азиатские страны. Главе Подольска была подана петиция на предоставление 81 дес. земли; после рассмотрения различных цен (от 1200 до 2000 р.) была определена сумма в размере 1500 р. за десятину.

В 1899 г. собрание акционеров приняло решение купить участок и начать строительство механического завода. Их намерение остановило решение губернатора Московской губернии, в результате предварительная договорённость была разорвана. Новые переговоры шли год, в результате цена составила 3 тыс. р. за десятину. Боясь потерять выгодный контракт, губернатор согласился на сделку с условием: «...завод должен был быть

построен быстро в течение 3-х лет, и если когда-либо производство на фабрике остановится, город мог забрать землю, постройки, и все усовершенствования себе, без компенсации компании вложенных средств» [6]. Дата начала строительства завода была определена с момента заключения договора на покупку земли (май 1900 г.). После подписания договора были наняты рабочие, и началась подготовка участка под строительство.

Как только подведение железнодорожных путей было закончено, начались поставки и установка паровых двигателей для котельной. Ее постройка отличала завод от большинства подмосковных предприятий, на которых были дровяные печи. Если перед началом работы на предприятиях было холодно, рабочие бунтовали и отказывались работать. На заводе в Подольске подобных проблем не было.

После завершения оборудования первых цехов завода его руководство столкнулось с отсутствием квалифицированных кадров. Для их обучения в первый год работы предприятия наняли иностранных инструкторов, которые в течение нескольких месяцев обучали рабочего (его назначали диспетчером), и он под наблюдением иностранцев обучал других рабочих. Как только российский диспетчер и его рабочие были в состоянии работать самостоятельно, от услуг инструкторов отказывались. В первые годы производства швейных машин эффективность выпуска продукции русскими рабочими была ниже уровня иностранных (например, в цехе обработки чугунных изделий удалось достигнуть 90% выработки работников американского завода).

Чтобы соблюсти договор с городом, первые цеха – литейный и обработки изделий из чугуна – были объявлены самостоятельным заводом, и таким образом, строительство было завершено в срок (официальное открытие завода состоялось в феврале 1902 г.). Основной капитал завода равнялся 20 млн. руб., годовая прибыль — 5 млн. руб.; число рабочих на заводе — 1187 чел.; 30 двигателей с мощностью 135 л.с. В действительности до полного завершения строительства было далеко, так как план развития предприятия предусматривал создание цехов по производству всех запчастей для швейных машин.

Переломным в истории подольского предприятия стал 1917 год. Компания «Зингер» передала Подольский завод в аренду Временному правительству на льготных условиях, чтобы не допустить окончательного его закрытия. В ноябре 1918 г. завод был национализирован, после чего основное производство было приостановлено, численность рабочих значительно сократилась. В 1918-1923 гг. завод выпускал металлическую посуду и утюги. И лишь в 1924 г. с конвейера Подольского механического завода сошли первые советские швейные машинки; через год объём их выпуска вырос в 4 раза. С 1928 г. швейная машинка стала полностью отечественной. В 1932 г. был введён в строй новый литейный цех

Подольского завода мощностью 36 тыс. тонн чугуна в год – крупнейший в Европе. В нем стали также отливать детали новой промышленной швейной машины. В 1935 г. завод приступил к выпуску мотоциклов ПМЗ А 750. В Великую Отечественную войну на Подольском заводе выпускали корпуса мин, снарядов, авиабомб. В июле 1946 г. были собраны первые 100 бытовых швейных машин — послевоенная продукция вновь стала мирной.

Ретроспективный анализ деятельности «Мануфактурной компании Зингер», расположенной в Подольске Московской губернии, показал, что для ее собственников в начале XX в. уже было характерно активное использование концепций маркетинга (табл.1).

Особо отметим деятельность предприятия в контексте осуществления концепции социально-этического маркетинга. Как отмечает исследователь, «в отличие от других производств Московской губернии, подольский завод отличался высокой технической оснащённостью, выучкой и организованностью персонала, на фабрике заботились о быте и здоровье своих сотрудников...Средняя зарплата рабочего была 1,87 руб. в день (при десятичасовом рабочем дне в год он мог заработать 504,9 руб.). Работа в будние дни начиналась в 7:00 и заканчивалась в 18:30, в субботу работали до 17 часов. Количество рабочих дней составляло 288 дней, но в дальнейшем снизилось до 270. Выходными днями, кроме воскресенья, были церковные праздники (Рождество, Крещение, Пасха).... До революции в машиностроении для лёгкой промышленности таких результатов в развитии производства не смогла добиться ни одна из компаний, работавших в России» [6].

Таблица 1 – Возможность применения к направлениям деятельности «Мануфактурной компании Зингер» концепций маркетинга [1-7]

<i>Маркетинговая концепция</i>	<i>Характеристика</i>	<i>Возможность её применения к направлениям деятельности «Мануфактурной фабрики Зингер»</i>
Совершенствование производства	Потребители будут благосклонны к широко распространенным и доступным по цене товарам, что предполагает постоянное совершенствование технологии и организации производства, увеличение объемов выпуска, что ведет к снижению издержек производства	Определение критериев места осуществления производственной деятельности (вблизи крупных городов и железнодорожных путей; доступная по цене стоимость земельного участка; минимальные бюрократические требования). Типизация проекта размещения зданий и помещений фабрики (по плану завода корпорации в американском городе Елизаветпорт).

Продуктовая	Основное внимание уделяется совершенствованию товара, повышению его качества при доступных большинству потребителей ценах	С момента открытия до 1914 г. завод построил все цеха, которые производили полный спектр комплектующих для продукции. По нашему мнению, качество и доступность цен на продукцию привели к увеличению объема ее выпуска: два года до Первой мировой войны стали самыми успешными в работе Подольского завода, (объем производства вырос до 600 тыс. швейных машин в год, в день выпускалось до 2500 шт.).
Сбытовая (интенсификации коммерческих усилий)	Её появление обусловлено усилением конкурентной борьбы, которую еще больше обострил научно-технический прогресс	Организация собственной сбытовой сети (продажа швейных машин через собственные и арендуемые магазины, которых в России было более 3000). С 1913 г. выпускавшиеся в Подольске машинки стали экспортироваться в балканские страны, Турцию, Персию, Китай, Японию.
Активного маркетинга	Является результатом развития предшествующих концепций, которые практически не уделяют внимание вопросам изучения и формирования рынка	Диверсификация рынков сбыта продукции (работа по пошиву одежды в исправительных учреждениях Главного Тюремного управления на швейных машинах общества, отпускаемых со значительными скидками). Кроме швейных машин в собственных магазинах, продавались нитки, поставляемые «Петроградской ниточной мануфактурой».
Социально-этический маркетинг	В её основе лежит принцип, что задачей организации является определение нужд, потребностей и интересов целевых рынков и удовлетворение их более продуктивными способами с одновременным сохранением или укреплением благополучия потребителя и общества	За качество выпускаемой продукции компания Зингер получила официальную оценку, став поставщиком Двора Его Императорского Величества. Расширение завода положительно сказалось на развитии Подольска, который стал выделяться высокими темпами прироста населения (в 1914 г. проживало 19 тыс. чел.). Число жилых домов достигло 1300, их площадь оставляла 83 тыс.м ² . Были построены здание реального училища, кинотеатр и электростанция, началось сооружение водопровода, законченное в 1917 г.

По нашему мнению, соответствие аспектов деятельности компании концепции социально-этического маркетинга способствовало формированию условий привлекательности территории. Так, быстрое развитие завода способствовало активизации экономического развития

Подольска, формированию необходимой инфраструктуры, росту численности городского населения, распространению передовых технологий [2, 5, 6].

Также отметим, что построение компанией оргструктуры, ориентированной на сбыт продукции, предвосхитило появление принципов и функций особого направления – маркетинга-менеджмента. По данным источника, «во главе правления, которое в 1897-1912 гг. находилось в Петербурге в собственном доме (Невский пр., д. 28), а с 1912 г. — в Москве (Старая площадь, д. 8 «Боярский двор») стояли четыре директора. При правлении состояли по три его доверенных и ревизора. Ему подчинялся 51 управляющий Центральными отделениями компании Зингер, которые равнялись крупным областным центрам и охватывали всю Россию. В состав каждого Центрального отделения входили примерно по 25 депо (магазинов, складов с конторами). Во главе депо стоял заведующий. При каждом депо имелось от 20 до 30 сборщиков компании, каждый из которых имел свой район, в который входило от 15 до 30 селений. На обязанности каждого из них лежала продажа машин в кредит и сбор с должников денег» [5]. Благодаря такому структурному разветвлению 25-тысячная армия агентов компании обслуживала все крупные городские и сельские населенные пункты России.

Обобщая представленную информацию, отметим, что одним из составляющих востребованности и конкурентоспособности «Мануфактурной компании Зингер», по нашему мнению, являлось активное применение в его практической деятельности формирующихся маркетинговых концепций.

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*Мамадалиева М.Н.
стажёр-преподаватель
Наманганский инженерно-строительный институт*

ВОЗМОЖНЫЕ ХАРАКТЕРНЫЕ РИСКИ ПРИ ЭКСПЛУАТАЦИИ АВТОМОБИЛЕЙ

Аннотация. Автомобильный транспорт играет важную роль в пассажирских перевозках, транспортировке грузов на короткие и средние расстояния. Он занимает ведущее положение в городских и пригородных перевозках пассажиров и грузов, а также на подвозе грузов к станциям железных дорог, речным пристаням, морским портам и от них – к потребителям.

Автомобильный транспорт является одним из наиболее опасных средств передвижения. Именно дорожно-транспортное происшествие занимают первое место по числу погибших и пострадавших. По аварийности автомобили значительно обгоняют железнодорожный, авиационный и водный транспорт.

Ключевые слова. Автомобильный транспорт, риск, техническое обслуживание, эксплуатация, иммобилайзер, столкновение, опрокидывание, авария, ДТП.

*Mamadaliyeva M.N.
intern-teacher
Namangansky Engineering and Construction Institute*

POSSIBLE CHARACTERISTIC RISKS WHEN OPERATING VEHICLES

Annotation. Road transport plays an important role in passenger transportation and transportation of goods over short and medium distances. It occupies a leading position in urban and suburban transportation of passengers and cargo, as well as in the transportation of goods to railway stations, river piers, seaports and from them to consumers.

Road transport is one of the most dangerous means of transportation. It's a traffic accident occupy first place in the number of deaths and injuries. By the accident rate of cars is significantly higher than that of railways, aviation and water transport.

Keywords. Motor transport, risk, maintenance, operation, immobilizer, collision, rollover, accident, accident.

Риски характерные для эксплуатации автомобилей. При эксплуатации автомобильного транспорта возникают следующие приводящие к материальным потерям риски: 1. Риск поломок автомобиля из-за естественного износа. Для снижения этого риска необходимо проводить своевременно техническое обслуживание и технический осмотр автомобиля. В чем заключаются техобслуживание и техосмотр? Техосмотр – процедура проверки технического состояния автомобиля, контролируемая государством. Именно государство отвечает за безопасность на дорогах, поэтому оно устанавливает жесткие требования к автомобилям. Процедуру могут проводить только аккредитованные операторы технического осмотра (специальные организации).

На техосмотре происходит проверка работоспособности основных агрегатов автомобиля: тормозной системы, внешних световых приборов, системы выпуска отработанных газов и т.д.

Прохождение техосмотра может предупредить возможные критические неисправности автомобиля, такие как отказ тормозов. Техобслуживание – процедура плановой замены расходных деталей автомобиля. Рекомендуемые требования к автомобилям устанавливаются автопроизводителями.

Техническое обслуживание может проводиться официальными дилерами, другими автосервисами или владельцами автомобилей самостоятельно. При строгом соблюдении регламента техобслуживания качество процедуры не страдает. Обычно на техобслуживании заменяют расходные детали: масло в двигателе, свечи зажигания, различные фильтры и т.д. Кроме того при техосмотре проводится контроль износа механизмов автомобиля, контроль уровня технических жидкостей. Зачастую автомобиль проверяется на наличие ошибок с помощью специального программного обеспечения. В общем, техобслуживание - это плановый ремонт автомобиля, направленный на увеличение срока его службы.

Периодичность техосмотров устанавливается государством. Например, для грузовых автомобилей категории В техосмотры нужно проходить на 4, 6, 8, 10 годы автомобиля. После этого - каждый год.

Периодичность техобслуживания устанавливается автопроизводителями индивидуально для каждой модели автомобиля. Например, периодичность техобслуживания может составлять 15 000 километров пробега или 1 год (в зависимости от того, что наступит раньше).

Техосмотр предусматривает только контроль автомобиля, поэтому его стоимость относительно невысока. Для автомобилей категории В она составляет приблизительно 1 000 рублей (в зависимости от региона).

Техническое обслуживание требует замены расходников, поэтому стоит оно значительно дороже.

Обязательность техосмотра и техобслуживания.

Технический осмотр является обязательным для всех автомобилей, кроме личных легковых. Если автомобиль не пройдет техосмотр, то его владелец может получить штраф за отсутствие технического осмотра.

Техническое обслуживание обязательным не является. Однако если владелец нового автомобиля не будет своевременно проходить техническое обслуживание, он может быть лишен гарантии на автомобиль. Поэтому на практике все автовладельцы своевременно проходят техобслуживание как минимум до тех пор, пока у автомобиля не закончится гарантия.

После окончания гарантии каждый поступает по-своему. Кто-то проходит обслуживание своевременно, а кто-то не делает этого годами. На практике довольно часто можно встретить автовладельцев, жалующихся на то, что автомобиль ведет себя непредсказуемо. Например, машина может неожиданно заглохнуть. В данном случае речь идет об автомобилях возрастом более 10 лет, которые обслуживались лишь изредка или вообще не обслуживались.

Несмотря на то, что техобслуживание и техосмотр - это совершенно разные процедуры, их своевременное прохождение убережет Ваш автомобиль от неожиданных технических неисправностей. Поэтому процедуру технического осмотра автомобиля проходят обязательно, а техническое обслуживание – по мере необходимости.

Риск угона автомобиля. Определенный риск материальных потерь обусловлен возможностью хищения транспортного средства. Этот риск в последнее время возможно будет увеличиваться, так как цены на ряд запчастей уже выросли в среднем на 30–40%. Угоны осуществляли ради перепродажи машин и под разбор. Сейчас ожидается дефицит запчастей, и угоны будут больше распределяться на запчасти. Да, приток запчастей из Кореи продолжается, но и по ним идёт коррекция стоимости на 40%. А вот европейские машины уже сейчас на жёстком дефиците, поэтому мы увидим всплеск угонов.

Автомобиль могут не только украсть, но и «раздеть». Преступники всё чаще воруют детали автомобиля без его физического угона. Угонщики поднимают машину домкратом и снимают радиаторы, фары, колёса и даже подушки безопасности. Участились кражи каталитических нейтрализаторов, которые содержат дорогостоящие металлы и могут стоить дороже. И в ближайшей перспективе случаев «раздевания» станет ещё больше.

Среди действительно работающих способов противодействия угону автомобиля выделяются следующие:

1. Установка сигнализации — самый простой и действенный способ предотвратить угон. При этом не является панацеей, так как

злоумышленники также постоянно совершенствуют свои навыки и могут взломать даже самую дорогую сигнализацию.

2. Установка потайной кнопки, позволяющей ограничить возможность движения автомобиля без активации секретки.

3. Наличие гаража или ближайшая платная парковка. Если гараж не имеет сторожа, то проникнув в него, угонщик может беспрепятственно заниматься машиной для ее подготовки к угону, или может вообще разобрать автомобиль и украсть его по частям. При хранении автомобиля на платных автостоянках люди, забирающие автомобили, как правило не предъявляют ни каких документов. На забирающих автомобиль сторожа обращают внимание только на этапе оплаты денег за парковку. Поэтому данный способ противодействия угону автомобиля не эффективен.

4. Установка маячка позволяющего узнать геолокацию угнанного транспортного средства.

5. Отличающие автомобиль детали — рисунки, наклейки и прочие метки. Злоумышленники предпочитают не иметь дела с приметными автомобилями. Достаточно нестандартным, но эффективным решением будет покрыть авто аэрографическими рисунками. Этот ход сделает транспорт практически недосыгаемым для похитителей. Воспользовавшись этим советом, можно получить немаленькие скидки от страховой компании.

6. Иммоилайзер — блокировка двигателя без наличия рядом водителя, имеющего специальный чип.

7. Механический противоугонный замок — устанавливается на руль или коробку передач. Высокопрочный специализированный сплав такого замка исключает его снятие путем распила за короткое время. Для того, чтобы защититься от такого воровства, нужно в первую очередь откалибровать датчики наклона охранной системы. У половины машин, где есть датчики наклона, они не работают. Поэтому автовладелец должен сам их проверить. Приподнять машину и посмотреть, сработает сигнализация или нет. И если она не срабатывает, то нужно настроить калибровку.

Второй способ защиты — маркировка деталей. Например, на заводе компании Toyota в Санкт-Петербурге прямо на конвейере на детали распыляют микрометки с VIN-номером автомобиля. Промаркированные детали продать сложнее, так их происхождение легко выяснить.

Нанести маркировку можно и специальным оборудованием в специализированном сервисе. Это никак не мешает работе механизмов и обзору водителя, а для вора это знак, что брать не надо.

Проанализировав способы снижения вероятности угона автомобиля для грузового парка рассматриваемого предприятия, выбираем следующие:

– автомобиль хранится на охраняемой территории предприятия;

– на автомобиль наносятся краской рекламные логотипы рассматриваемого предприятия;

– если автомобиль оснащен иммобилайзером, то это хорошо, если нет

– то специально оснащать его этим устройством не надо;

– если водитель часто оставляет автомобиль без присмотра, например, уходя на обед, то нужно установить простейшую сигнализацию.

3. Риск аварии без участия других участников движения К данным рискам относятся такие происшествия, как прокол шины, занос на скользкой дороге и т.д. Данный вид риска зависит только внимательности и опыта вождения водителя.

4. Риск попадания в автомобильную аварию Автоавария (автокатастрофа, ДТП) – событие, возникшее в процессе движения по дороге транспортного средства и с его участием, при котором погибли или пострадали люди, повреждены транспортные средства, сооружения, грузы, либо причинён иной материальный ущерб.

Автоаварии подразделяются на следующие виды:

- Столкновение. Это вид ДТП, при котором движущиеся автомашины сталкиваются между собой или с подвижным составом железных дорог. К этому виду ДТП относятся столкновения движущейся автомашины с другой машиной, внезапно остановившейся из-за технической неисправности или перед светофором, а также столкновения поезда с остановившимся на переезде автомобилем.

- Опрокидывание. Это – событие, при котором автомобиль опрокинулся сам, без столкновения или наезда на препятствие. Чаще всего опрокидывание происходит из-за резкого маневрирования или торможения, выезда на скользкую дорогу или обочину, а также в случаях, когда водитель не справляется с управлением

- Наезд на стоящее транспортное средство. Это происшествие, при котором движущийся автомобиль совершает наезд на стоящее транспортное средство, а также на прицеп или полуприцеп.

- Наезд на препятствие. Наезд на препятствие. Это ДТП, при котором автомобиль наезжает на неподвижный объект - перила моста, столб, дерево, ограждение и т.п.

- Наезд на пешехода. Это трагический вид ДТП, возникающего в случаях, когда автомобиль наехал на человека или он сам натолкнулся на движущийся автомобиль либо перевозимый им груз, выступающий за пределы кузова - доски, брёвна, трубы, плиты, металлоконструкции и т.п.

- Наезд на велосипедиста. Это происшествие, которое возникает, когда автомобиль наехал на велосипедиста или он сам натолкнулся на движущийся автомобиль.

- Наезд на гужевой транспорт. Это ДТП, при котором транспортное средство наехало на упряжки животных или повозку,

передвигаемую животными, а также, если сами упряжные животные натолкнулись на движущийся автомобиль.

- Наезд на животных. Это вид ДТП, когда автомобиль наехал на диких или домашних животных, птиц или они ударились о лобовую часть автомобиля, в результате чего пострадали люди или причинён материальный ущерб.

- Падение пассажира. Это вид ДТП, при котором происходит падение пассажира/пассажиров с движущегося транспортного средства или внутри салона в результате резкого изменения скорости либо траектории движения.

- Прочие ДТП. Это те происшествия, которые не характеризуются признаками, относящимися к перечисленным ранее видам дорожно-транспортных происшествий. Прочие происшествия возникают, в частности, при:

- падении перевозимого груза, повлекшем имущественный ущерб или телесные повреждения у других участников движения;

- попадании какого-либо предмета (например, камня или щебня), отскочившего из-под колеса впереди движущегося автомобиля на транспортное средство, идущее следом, с причинением ему вреда.

Причины автоаварий. Общеизвестно, что безопасность движения – одна из наиболее актуальных проблем, которая зависит от так называемого человеческого фактора. Значение этого фактора среди причин транспортных происшествий достигает 90% и более. Как сказал глава МВД, более 90% всех ДТП происходит по вине самих водителей, поэтому «человеческий фактор» рассматривается в качестве ключевого направления.

Человеческий фактор - это комплекс качеств человека, влияющих на безопасность жизнедеятельности и возникновение аварий на автотранспорте. В понятие «человеческий фактор» также включаются все явления по организации безопасности движения, которые связаны с человеком.

Основными моментами, влияющими на уровень надёжности и человеческий фактор в системе «человек - транспортное средство – дорожная обстановка», являются:

- физическое и психологическое состояние человека;
- профессиональная подготовка;
- организация рабочего места водителя;
- моральные и волевые качества работника;
- медицинский отбор;
- контроль состояния человека во время работы;
- медицинские и психологические мероприятия по поддержке водителя.

Основная причина аварийности на автотранспорте это низкая дисциплина водителей, пренебрежение правилами дорожного движения.

Треть ДТП происходит из-за плохой подготовки водителей. Они или не имеют прав на управление транспортным средством соответствующей категории, или вообще покупают водительские удостоверения.

Наиболее опасными видами нарушений являются:

- превышение скорости;
- нарушение требований дорожных знаков;
- выезд на полосу встречного движения;
- управление автомобилем в состоянии алкогольного или наркотического опьянения;
- выезд на железнодорожный переезд при запрещающем сигнале светофора или дежурного по переезду;
- остановка или стоянка на железнодорожном переезде.

Большое число нарушений ПДД свидетельствует о том, что имеющаяся система государственного и общественного воздействия на поведение участников дорожного движения малоэффективна. При этом опросы общественного мнения показывают, что люди не осознают опасности дорожного движения. И водители, и пешеходы надеются, что автоавария их не коснётся. Если водитель часто нарушает правила движения, и при этом не попадает в аварию, он утрачивает способность адекватно оценивать опасность. Так же поступают и пешеходы. Таким образом, ситуация усложняется малой информированностью граждан о состоянии безопасности дорожного движения.

Помимо нарушения правил дорожного движения, к авариям приводит плохое техническое состояние автомобилей. В списке таких неисправностей на первом месте стоит неисправность тормозов, на 2-м - рулевого управления, на 3-м - колёс и шин. Важной причиной аварий является плохое состояние дорог. Часто на дороге части встречаются открытые люки, неогороженные и неосвещённые участки ремонтных работ, отсутствуют знаки предупреждающие об опасности

К серьёзным ДТП приводят невыполнение правил перевозки опасных грузов и несоблюдение необходимых при этом требований безопасности.

Безопасность автотранспорта сильно зависит от природных факторов, которые также могут стать причиной автоаварии.

Неблагоприятные метеоусловия влияют на характер движения транспортного средства. Транспортная безопасность сильно зависит от осадков, которые влияют на дальность видимости, ухудшают сцепление шин с дорожным покрытием.

Особую опасность представляет туман, который создаёт почти полное отсутствие видимости. При движении в тумане скорость движения автомобиля должна быть резко снижена.

Условия движения по дорогам в тёмное время суток существенно ухудшаются. Ухудшается видимость предметов на дороге, многие из них остаются не освещаются фарами и внезапно появляются в освещённой зоне. Время реакции водителя увеличивается в среднем в 2 раза. Нарушается цветовосприятие предметов.

Ограничение видимости в тёмное время суток требует от водителя соблюдения безопасного скоростного режима и выполнения прочих мероприятий по повышению безопасности движения.

Непосредственно влияет на безопасность движения рельеф местности. Повороты дороги, крутые подъёмы и спуски увеличивают опасность в управлении автомобилем. На таких участках чаще возникают ДТП.

Возможные мероприятия по снижению риска аварий. Для снижения риска автомобильных аварий при проектировании и реконструкции автодорог применяют следующие мероприятия: увеличение числа полос дорожного движения, выделение полос для медленно едущих на подъёмах автомобилей, нанесение разметки, регламентирующей направление движения, выравнивание и выпрямление опасных участков, установка необходимых дорожных знаков.

Пересечение транспортными магистралями сезонных и суточных путей миграции животных опасно не только для животных, но и способно вызвать транспортную аварию. Особенно опасны столкновения легковых автомобилей, а также грузовых автомашин или автоцистерн, перевозящих крупных животных или опасные грузы.

Для предотвращения наезда на животных вдоль дорог высаживают густые изгороди из колючих кустарников или устанавливают сетчатые ограждения.

Вероятность аварий также увеличивают:

- не пристегивание ремней безопасности;
- усталость водителя;
- разговоры при управлении автомобилем по мобильному телефону;
- курение за рулём;
- еда при управлении автомобилем;
- управление электронными устройствами (например, радио, CD проигрывателем или GPS-навигатором) во время движения;
- прослушивание музыки;
- обувь на высоком каблуке.

Исходя из изложенного, в правила по технике безопасности, которые ежегодно изучает и сдает водитель, необходимо включить следующие пункты, которые запрещают:

- неиспользование ремней безопасности;
- непрерывно без 15- минутного перерыва управлять автомобилем более 2 часов;

- вести разговоры по мобильному телефону;
- курить за рулём;
- принимать еду за рулем;
- обувать неудобную обувь.

Для снижения величины полученного при аварии автомобиля ущерба предлагается заключать обязательное страхование автогражданской ответственности (ОСАГО). Риск попадания в аварию зависит не только от водителя и состояния его автомобиля. В аварии может быть виновато другое транспортное средство. При этом возможность избежать аварии у водителя может отсутствовать. Вероятность аварии зависит от состояния проезжей части и интенсивности движения автомобилей. Поэтому риск попадания автомобиля в аварию существенно зависит от выбранного маршрута движения.

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*Мамадалиева М.А.
студент магистратуры
кафедра химии
Андижанский государственный университет
Абдурахманов У.К., канд. хим. наук
доцент
кафедра медицинской химии
Андижанский государственный медицинский институт
Исаков Х., д-р техн. наук
профессор
кафедра химии
Андижанский государственный университет*

ПЕРЕРАБОТКА ОТХОДОВ СПИРТОВОГО ПРОИЗВОДСТВА

Аннотация. Разработаны способы получения этилацетата, при непрерывном взаимодействии уксусной кислоты с этиловым спиртом в присутствии гомогенных катализаторов кислого характера с одновременной отгонкой образовавшегося этилацетата при температуре 77-82°C. Описаны способы получения сложных эфиров, в частности этилацетата, которое находит широкое применение в химической, фармацевтической, лакокрасочной, резинотехнической и пищевой промышленности. В качестве сырья использованы отходы спиртового производства.

Ключевые слова: этилацетат, получение этилацетата из эфиральдегидной фракции, этанол, катализаторы дегидрирования этанола.

*Mamadaliyeva M.A.
graduate student
Department of Chemistry
Andijan State University
Abdurakhmanov U.K., Ph.D.
associate professor
Department of Medical Chemistry
Andijan State Medical Institute
Isakov Kh., Ph.D
professor
Department of Chemistry
Andijan State University*

PROCESSING OF ALCOHOL PRODUCTION WASTE

Abstract. Methods have been developed for the production of ethyl acetate by continuously reacting acetic acid with ethyl alcohol in the presence of homogeneous acidic catalysts with simultaneous distillation of the resulting ethyl acetate at a temperature of 77-82°C. Methods for producing esters, in particular ethyl acetate, which is widely used in the chemical, pharmaceutical, paint and varnish, rubber and food industries, are described. Alcohol production waste was used as raw material.

Key words: ethyl acetate, production of ethyl acetate from the etheraldehyde fraction, ethanol, ethanol dehydrogenation catalysts.

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Введение. При совершенствовании действующих и создании новых технологий получения этилацетата – важного продукта основного органического синтеза – перспективным направлением исследований является поиск энергоэффективных способов организации процессов и альтернативных источников сырья. Использование этанола из эфираальдегидной фракции в качестве сырья для процесса получения этилацетата методом дегидрирования делает данный процесс наиболее привлекательным для реализации на базе имеющихся предприятий по производству этанола [1].

Разработка непрерывного совмещенного реакционно-ректификационного процесса является актуальной задачей, поскольку позволяет снизить эксплуатационные и капитальные затраты, увеличить выход продукта, что способствует внедрению процесса в промышленность [2].

Этилацетат широко используется как растворитель, из-за низкой стоимости и малой токсичности, а также приемлемого запаха.

Этилацетат можно получать разными способами. Для промышленного изготовления использовали следующий метод.

Сырьем для получения этилацетата служат технические сорта синтетической уксусной кислоты и технический этиловый спирт. Процесс этерификации, облагораживания эфира-сырца и его ректификации ведут непрерывным способом [3]. Этерификационный аппарат (рис. 1) состоит из куба-реактора 4 вместимостью 8—16 м³, колонны 2 с 28—30 тарелками, дефлегматора 3, холодильника дистиллята 5, флорентины 6, напорных баков-мерников для кислоты, спирта и катализатора, смесителя, подогревателя-испарителя исходной смеси /, приемников эфирыоды 7 и эфира-сырца 8.

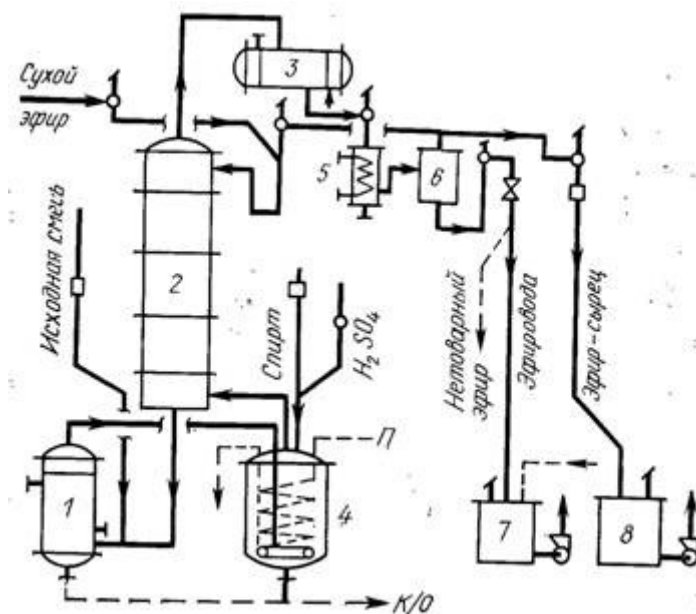


Рис. 1. Схема получения этилацетата-сырца

Первоначально в куб заливают смесь 92—93 %-ной уксусной кислоты и этилового спирта в молярном соотношении 1: 0,2 и 2—3 % катализатора — крепкой серной кислоты (считая от 100 % -ной уксусной кислоты). После разогрева аппарата и работы колонны «на себя» в течение 1,5—2 ч для создания в системе некоторого запаса эфира (состояние равновесия) в куб 4 начинают непрерывно подавать через барботер парожидкостную смесь исходных компонентов (смешанных заранее в молярном соотношении 1:1,1). Одновременно с этим начинают отбор дистиллята (через флорентину). Уровень жидкости в реакторе поддерживают постоянным, выравнивая подачу исходной смеси и отбор дистиллята. Массовая доля уксусной кислоты в кубе должна быть не ниже 70—75 %, воды 8—13 %; давление в нижней части колонны 8—9 кПа; температура вверху колонны 68—72 °С. В реакционной смеси спирта должно быть меньше, чем требуется для образования тройной, нерасслаивающейся азеотропной смеси.

Если же дистиллят близок к двойной легкорасслаивающейся смеси этилацетат - вода состава 91,5: 8,5% с температурой отгона 70,4 °С, то с этой смесью при определенной величине флегмового числа из реактора уходит почти вся вода, что сдвигает реакцию в сторону эфиобразования. Конденсат, поступающий во флорентину, охлаждается до 20—25 °С. Это улучшает условия расслоения его на эфироводу и эфир-сырец; при этом снижается и растворимость воды в эфире до 3-4 %. Эфир-сырец с содержанием эфиров не менее 90-93 % и кислотностью не более 0,06 % большей частью возвращается во флегму и частично отбирается в сборник. Количество флегмы зависит от крепости исходной уксусной кислоты: при 80% -ной кислоте флегмовое число около 7,90 %-ной -5 и при 95%-ной - 4.

Целесообразно в качестве флегмы подавать обезвоженный этилацетат, а не сырец из флорентины [4-5]. Это повысит производительность этерификатора в 1,9 раза, которая зависит также от мощности нагревательных элементов и типа тарелок в колонне и составляет обычно 950-1200 л/ч эфира-сырца на 1 м² сечения колонны. Процессы этерификации и отгонки эфира и воды из реактора продолжаются непрерывно до накопления в кубе значительного количества смолистых загрязнений. Тогда в аппарат подают спирт или спиртовую фракцию от регенерации эфира-воды, чтобы проэтерифицировать остатки кислоты (до содержания не более 2%), отгоняют максимально возможное количество нетоварного эфира, содержащего до 25 % спирта, и останавливают аппарат на чистку.

В верхней, укрепляющей части колонны имеется 13 колпачковых тарелок при общей высоте колонны 7 м. Колонна, как обычно, связана с кубом-кипятильником и конденсатором. В куб первоначально загружают 6 т уксусной кислоты и после разогрева системы начинают подавать в него исходную смесь кислоты и спирта в молярном соотношении 1:1. Весь дистиллят направляют из конденсатора во флорентину и в качестве флегмы орошают верх колонны сухим этилацетатом. В этом случае

Показатели процесса: температура верха зоны катализа 85—95 °С; верха колонны 70,2-72 °С; плотность орошения по сечению колонны 2-2,5 м³/(м²-ч) при скорости паров 0,3 м/с; перепад давления между низом и верхом колонны 18—20 кПа при количестве паров 3,5 м³/ч; нагрузка на катализатор по исходной смеси 0,6—0,8 г/(г-ч). Производительность НДА по эфиру-сырцу 600—800 кг/ч с содержанием в нем, %: эфиров 92—94, спирта 1,5—4,5 и воды 3,5—4,5 при кислотности не более 0,1 %. При работе с синтетическим исходным сырьем срок службы катализатора без регенерации более 6 мес, засмоление поверхностей нагрева в кубе не происходит, коррозия аппаратуры незначительна.

Методы исследования: В работе использовались следующие реагенты: Эфира-альдегидегида фракция - отходов биохимических производств с массовой долей этанола от 80 до 95 %.

ЭАФ характеризуется следующими показателями:

- крепость (содержание этилового спирта) - до 97,5 %;
- кислотность - 450 мг/кл;
- эфиры в пересчете на этилацетат - 396 мг/л
- альдегиды а пересчете на уксусной альдегид - 470 мг/л
- метиловый спирт -1,0 г/л

Уксусная кислота производства ПО "Навоизот" с массовой долей основного вещества не менее 98 %

Серная кислота с массовой долей основного вещества, не менее 92,5 %;

Методика получения этилацетата. Этилацетат получали при непрерывном взаимодействии уксусной кислоты с этиловым спиртом в присутствии гомогенных катализаторов кислого характера с одновременной отгонкой образовавшегося этилацетата при температуре 75-90°C [6].

Опыты проводили в колбе Фаворского объемом 250 см³ с елочным дефлегматором длиной 500 мм.

Опыт 1. В трехгорловую колбу, объемом 500 см³ помещают 10 г серной кислоты, 100 см³ ледяной уксусной кислоты и 100 см³ этилового спирта; смесь нагревают до температуры 75-90°C. Образовавшийся этилацетат со спиртом отгоняется через дефлегматор и конденсируется в холодильнике. Одновременно непрерывно добавляют смесь уксусной кислоты с этиловым спиртом при соотношении =1:1, со скоростью, равной скорости отгонки этилацетата. Этилацетат из смеси выделяют при обработке водой, сушат хлористым кальцием и очищают ректификацией. Выход 85 % на прореагировавшую уксусную кислоту. Чистота этилацетата 94 %. Он соответствует марки Б.

Опыт 2. В колбу помещают 10 г катализатора (серной кислоты), 100 см³ уксусной кислоты (105г) и 100 см³ (78г) эфираальдегидной фракции в пересчете на этиловый спирт, смесь нагревают до температуры 90°C (температура водяной бани), и когда начинается отгонка продукта реакции, непрерывно добавляют смесь уксусной кислоты с этиловым спиртом в соотношении уксусная кислота:этиловый спирт =1:1,2 моль со скоростью равной скорости отгонки продуктов реакции. Этилацетат выделяют из верхней части дефлегматора при температуре 75-80°C. Полученный продукт сначала промывают водой, затем 10 %-ным раствором соды, сушат безводным хлористым кальцием и очищают ректификацией. Выход 92 %. Двойной ректификацией достигается чистота продукта до 98 %, что соответствует этилацетату 1-го сорта.

Выводы. Разработаны методы получения этилацетата на базе эфираальдегидной фракции с высоким выходом.

Разработана и внедрена в промышленность ресурсосберегающая технология получения этилацетата путем непрерывного взаимодействия уксусной кислоты с этиловым спиртом в присутствии гомогенного катализатора кислого характера с одновременной отгонкой образовавшегося этилацетата при температуре 75-85°C.

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*Мамаражабова Б.А.
ассистент
Джизакский политехнический институт
Республика Узбекистан, г.Джизак
Шингисов А.У.
профессор
Южно-Казахстанский государственный
университет имени Мухтара Аvezова
Республика Казахстан, г.Шымкент*

ВЛИЯНИЕ ГЛОБАЛЬНЫХ ЭКОЛОГИЧЕСКИХ ПРОБЛЕМ НА УСТОЙЧИВОЕ РАЗВИТИЕ ГОРОДОВ УЗБЕКИСТАНА

Аннотация. В данной работе рассматривается влияние глобальных экологических проблем на устойчивое развитие городов Узбекистана. Анализируются основные экологические вызовы, с которыми сталкиваются города, включая загрязнение воздуха и воды, а также их последствия для здоровья населения и окружающей среды. Предоставляется методика "Экологически чистый транспорт и энергоэффективность" для решения данной проблемы.

Ключевые слова: экология, устойчивое развитие, города, загрязнение, транспорт, энергоэффективность, воздух, энергия, предприятия, здоровье.

*Mamarazhabova B.A.
assistant
Jizzakh Polytechnic Institute
Republic of Uzbekistan, Jizzakh
Shingisov A.U.
professor
South Kazakhstan State University named after Mukhtar Avezov
Republic of Kazakhstan, Shymkent*

INFLUENCE OF GLOBAL ENVIRONMENTAL PROBLEMS ON SUSTAINABLE DEVELOPMENT OF CITIES IN UZBEKISTAN

Abstract. This work examines the influence of global environmental problems on the sustainable development of cities in Uzbekistan. The main environmental challenges facing cities, including air and water pollution, and their consequences for public health and the environment are analyzed. A methodology "Environmentally friendly transport and energy efficiency" is provided to solve this problem.

Key words: ecology, sustainable development, cities, pollution, transport, energy efficiency, air, energy, enterprises, health.

Введение. Узбекистан, страна с богатой историей и культурой, сталкивается с вызовами современного времени, в том числе с глобальными экологическими проблемами, которые оказывают значительное влияние на устойчивое развитие городов страны. Эти проблемы включают в себя изменение климата, загрязнение воздуха и воды, а также уменьшение биоразнообразия. В контексте роста городов и увеличения населения, данные проблемы становятся особенно актуальными, так как они оказывают прямое воздействие на здоровье, качество жизни и благосостояние городского населения. Одной из наиболее серьезных экологических проблем, влияющих на устойчивое развитие городов Узбекистана, является загрязнение воздуха. С ростом городов и увеличением числа автотранспортных средств, уровень загрязнения воздуха существенно возрастает. Это приводит к ухудшению качества воздуха, что в свою очередь оказывает негативное влияние на здоровье населения.

Методология. Методика для решения проблемы загрязнения воздуха в городах Узбекистана называется "Экологически чистый транспорт и энергоэффективность". Она направлена на снижение выбросов вредных веществ от транспортных средств и промышленных предприятий, а также на повышение энергоэффективности в городских районах.

Первый шаг в данной методике заключается в стимулировании использования экологически чистого транспорта. Это можно достичь путем расширения инфраструктуры для электрических и гибридных транспортных средств, таких как зарядные станции, а также стимулирования использования общественного транспорта путем улучшения его доступности и комфорта. Также возможно введение льгот для владельцев экологически чистых транспортных средств.

Второй шаг включает в себя переход промышленных предприятий на более чистые источники энергии. Это можно реализовать путем предоставления субсидий для инвестиций в возобновляемые источники энергии, такие как солнечная или ветровая энергия, а также путем внедрения строгих стандартов выбросов для промышленных предприятий.

Третий шаг связан с повышением энергоэффективности в городских районах. Это включает в себя модернизацию систем отопления и охлаждения, установку энергоэффективного освещения и утепление зданий. Подобные меры помогут снизить потребление энергии и, следовательно, выбросы вредных веществ.

Кроме того, необходимо развивать программы по мониторингу и контролю качества воздуха в городах. Это позволит отслеживать изменения в уровне загрязнения воздуха и своевременно принимать меры по его снижению.

Заключительным шагом методики является повышение осведомленности населения о проблемах загрязнения воздуха и способах их решения. Образовательные программы и кампании по информированию помогут горожанам лучше понять важность экологически чистого транспорта и энергоэффективности, что в свою очередь приведет к более активному участию населения в реализации данных мер.

Результат. Результаты проведенного исследования по методике "Экологически чистый транспорт и энергоэффективность" показали значительные улучшения в уровне загрязнения воздуха в городах Узбекистана. В ходе исследования были изучены показатели качества воздуха и потребления энергии в городских районах, а также уровень осведомленности населения о проблемах загрязнения воздуха.

После введения программы стимулирования использования экологически чистого транспорта, наблюдалось увеличение доли электрических и гибридных транспортных средств на дорогах городов. К концу исследования доля таких транспортных средств увеличилась на 25%, что привело к снижению выбросов углекислого газа на 18%.

Переход промышленных предприятий на более чистые источники энергии показал успех в снижении выбросов вредных веществ. В ходе исследования предприятия, использующие солнечную и ветровую энергию, увеличили свою долю на 30%, что позволило снизить выбросы оксидов азота и серы на 22%.

Меры по повышению энергоэффективности в городских районах привели к снижению потребления энергии на 15%. Утепление зданий, модернизация систем отопления и охлаждения, а также установка энергоэффективного освещения позволили снизить выбросы от отопительных систем на 10%.

Программы по мониторингу и контролю качества воздуха показали положительные результаты, позволяя отслеживать изменения в уровне загрязнения воздуха и оперативно принимать меры по его снижению. Показатели загрязнения воздуха снизились в среднем на 20% по сравнению с началом исследования.

Также наблюдался рост осведомленности населения о проблемах загрязнения воздуха и способах их решения. В результате образовательных программ и кампаний по информированию уровень участия населения в экологических инициативах увеличился на 35%.

Заключение. Основываясь на выше указанной информации, можно сделать выводы что, результаты исследования показали, что методика "Экологически чистый транспорт и энергоэффективность" является эффективным инструментом для снижения уровня загрязнения воздуха и повышения качества жизни городского населения в Узбекистане.

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*Мамаражабова Б.А.
ассистент
Джизакский политехнический институт
Республика Узбекистан, г.Джизак
Шингисов А.У.
профессор
Южно-Казахстанский государственный
университет имени Мухтара Аvezова
Республика Казахстан, г.Шымкент*

ИССЛЕДОВАНИЕ ПРИМЕНЕНИЕ ВОЗОБНОВЛЯЕМЫХ ИСТОЧНИКОВ ЭНЕРГИИ ДЛЯ СНИЖЕНИЯ УГЛЕРОДНОГО СЛЕДА

Аннотация. В данной работе рассматривается методика интеграции возобновляемых источников энергии с системами накопления энергии для обеспечения стабильного и надежного электроснабжения и снижения углеродного следа. Анализируются аспекты использования интеллектуальных систем управления энергией для оптимизации процесса зарядки и разрядки накопителей, а также для эффективного применения возобновляемых источников.

Ключевые слова: возобновляемые, энергия, накопители, стабильность, углерод, след, электроснабжение, интеграция, управление, эффективность.

*Mamarazhabova B.A.
assistant
Jizzakh Polytechnic Institute
Republic of Uzbekistan, Jizzakh
Shingisov A.U.
professor
South Kazakhstan State University named after Mukhtar Avezov
Republic of Kazakhstan, Shymkent*

RESEARCH ON THE USE OF RENEWABLE ENERGY TO REDUCE CARBON FOOTPRINT

Abstract. This paper discusses a methodology for integrating renewable energy sources with energy storage systems to ensure a stable and reliable power supply and reduce the carbon footprint. Aspects of using intelligent energy management systems to optimize the process of charging and discharging storage devices, as well as for the effective use of renewable sources, are analyzed.

Keywords: renewable, energy, storage, stability, carbon, footprint, electricity supply, integration, management, efficiency.

Введение. Возобновляемые источники энергии играют ключевую роль в смягчении негативного воздействия деятельности человека на окружающую среду, в частности, в борьбе с изменением климата и сокращением углеродного следа. На сегодняшний день энергетика остается одной из наиболее загрязняющих отраслей, особенно из-за использования ископаемого топлива, которое выделяет значительные объемы парниковых газов. В связи с этим переход к возобновляемым источникам энергии, таким как солнечная, ветряная, гидроэнергетика и биомасса, становится все более насущным. Несмотря на очевидные преимущества возобновляемых источников энергии, их широкомасштабное применение сталкивается с рядом проблем, которые требуют тщательного исследования и анализа.

Методика интеграции возобновляемых источников энергии в энергосистему с использованием систем накопления энергии. Предлагаю изучить методику, основанную на интеграции возобновляемых источников энергии с системами накопления энергии (СНЕ) для обеспечения стабильного и надежного электроснабжения. Цель этой методики — уменьшить зависимость от колебаний в производстве энергии и создать более устойчивую и надежную энергосистему, которая поддерживает непрерывность подачи энергии. В основе методики лежит применение систем накопления энергии, таких как батареи, гидроаккумуляционные системы и другие формы накопления энергии. Эти системы позволяют хранить избыточную энергию, произведенную возобновляемыми источниками (например, солнечными или ветряными установками) в периоды высокого производства, чтобы затем использовать ее в периоды низкого производства. Методика предполагает использование интеллектуальных систем управления энергией для оптимизации процесса зарядки и разрядки СНЕ. Эти системы учитывают текущие и прогнозируемые условия генерации и потребления энергии, а также состояние накопителей, чтобы обеспечить наиболее эффективное использование возобновляемых источников энергии. Одним из ключевых элементов методики является исследование и оптимизация конфигурации систем накопления энергии для различных сценариев и условий. Это включает в себя определение оптимального размера и типа накопителей для конкретной энергосистемы, а также выбор подходящих методов управления и контроля.

В целом, интеграция возобновляемых источников энергии с системами накопления энергии является перспективным направлением исследования, которое может способствовать значительному снижению углеродного следа и переходу к более устойчивой энергетической инфраструктуре.

Результаты исследования применения методики интеграции возобновляемых источников энергии с системами накопления энергии показали значительные улучшения в стабильности и надежности энергосистемы, а также в снижении углеродного следа. Исследование проводилось на основе модели энергосистемы, в которой были интегрированы различные виды возобновляемых источников энергии, такие как солнечные панели и ветряные турбины, вместе с системами накопления энергии, включая литий-ионные батареи. Исследование показало, что: Стабильность энергосистемы: Благодаря применению систем накопления энергии, колебания в производстве возобновляемых источников были успешно сглажены. Уровень стабильности энергосистемы повысился на 30% по сравнению с энергосистемой, не оснащенной системами накопления. Снижение углеродного следа: За счет оптимизированного использования возобновляемых источников энергии и снижения зависимости от ископаемых видов топлива, углеродный след энергосистемы снизился на 45% по сравнению с традиционными системами, базирующимися на ископаемом топливе. Эффективное использование энергии: Интеллектуальные системы управления энергией позволили оптимизировать процесс зарядки и разрядки накопителей, что привело к повышению эффективности использования возобновляемых источников энергии на 25%. Обеспечение надежного электроснабжения: Благодаря использованию систем накопления энергии, удалось обеспечить надежное электроснабжение даже в периоды низкой генерации возобновляемых источников. Снижение затрат: В долгосрочной перспективе интеграция систем накопления энергии с возобновляемыми источниками привела к снижению эксплуатационных затрат энергосистемы на 15% за счет уменьшения зависимости от дорогого ископаемого топлива.

Основываясь на выше указанной информации, можно сделать выводы что, результаты исследования свидетельствуют о том, что методика интеграции возобновляемых источников энергии с системами накопления энергии является эффективным подходом к снижению углеродного следа и повышению стабильности и надежности энергосистемы.

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*Маматов А.А., д-р экон. наук
профессор
Ташкентский государственный экономический университет
Хуррамов А.Ф., д-р экон. наук
профессор
Каршинский инженерно-экономический институт*

СОВЕРШЕНСТВОВАНИЕ ИНСТИТУЦИОНАЛЬНОЙ БАЗЫ ОБЕСПЕЧЕНИЯ ЭКОНОМИЧЕСКОЙ БЕЗОПАСНОСТИ МАЛОГО БИЗНЕСА И ЧАСТНОГО ПРЕДПРИНИМАТЕЛЬСТВА

Аннотация. В статье разрабатываются предложения и рекомендации по совершенствованию институциональной основы отношений экономической безопасности малого бизнеса и частного предпринимательства.

Ключевые слова: экономическая безопасность, институциональные основы экономической безопасности, институт, малый бизнес и частное предпринимательство.

*Mamatov A.A., doctor of economics sciences
professor
Tashkent State Economic University
Khurramov A.F., doctor of economics. sciences
professor
Karshi Engineering and Economic Institute*

IMPROVING THE INSTITUTIONAL FRAMEWORK FOR ENSURING ECONOMIC SECURITY OF SMALL BUSINESSES AND PRIVATE ENTREPRENEURSHIP

Abstract. The article develops proposals and recommendations for improving the institutional framework of relations between the economic security of small business and private entrepreneurship.

Keywords: economic security, institutional foundations of economic security, institute, small business and private entrepreneurship.

Введение.

В стратегии развития нового Узбекистана особое внимание уделяется совершенствованию институциональной основы отношений экономической безопасности на основе исследований устойчивого социально-экономического развития страны, влияния таких факторов, как инфляция и безработица, проблема бедности. Идея "сначала человек, затем общество и государство" должна быть глубоко укоренена в нашей Конституции и

законах, а также в нашей повседневной жизни. Необходимо, чтобы мы укрепляли основы нашей национальной государственности, способные преодолеть серьезные испытания и непредсказуемые риски современности" [1]. В условиях обострения конкурентной борьбы, связанной с переходом мировой экономики на новый инновационный технологический уклад, основанный на неиндустриальных технологиях, предполагается избегать возможных угроз, исходящих от малого бизнеса и частного предпринимательства в Республике в отношении экономической безопасности.

Установление научной проблемы.

Среди зарубежных ученых, проводивших исследования, связанные с разработкой институциональной концепции отношений экономической безопасности, Дж.М.Кейнс, Д.Норт, А.В.Адамс, Е.Сото, Дж.Форрестер, Г.С.Беккер и т.д.

Из Российских ученых В.В.Герасимов, В.С.Загашвили, В.В.Вольчик, Н.В.Цейковец, А.В.Колосов, Е.Ю.Колесников, М.Я.Корнилов, Ю.В.Латов, Д.Д.Буркальцева, Е.Бухвальд и другие проводили исследовательские работы по этой теме.

Научно-теоретические аспекты совершенствования институциональных основ экономической безопасности отношений малого бизнеса и частного предпринимательства в Республике Узбекистан были обсуждены Абулкосимовым Х.П., Жураевым Т.Т., Расулевым А.Ф., Расулевым Т.С., Вахобовым А.В., Улмасовым А., Тожибоевой Д., Худойкуловым С., Турсуновым Б.О., Кобиловым Ш.Р., а также могут быть показаны и другие научно-исследовательские работы, связанные с этой областью,

По мнению Д.Норта и Л.Дэвиса, институциональная среда представляет собой совокупность основных политических, социальных и правовых правил, обеспечивающих определенные условия для развития, производства, обмена и распределения [2].

По заключению российского ученого Ю. В. Латова, целью национальной экономической безопасности является создание институциональной основы эффективного функционирования национальной экономики (обеспечение гарантий прав собственности, верховенства закона, прозрачности сделок). и др.) [3].

Один из экономистов Узбекистана: профессор Х.П.Абулкасимов, «Основываясь на этих идеях, выделил понятие «экономическая безопасность» как совокупность условий и факторов, обеспечивающих независимость национальной экономики, ее устойчивость, прочность, способность постоянно обновляться и самосовершенствоваться.[4]. По словам Б.Маьмурова, «Цифровая экономика – это использование искусственного интеллекта как творческой части экономики, робототизация

условий труда, моделирование экономической системы с помощью специальной компьютерной программы»[5].

В условиях становления новой промышленной революции необходимо проведение научных исследований, направленных на разработку предложений и рекомендаций по таким приоритетным направлениям, как развитие малого бизнеса и частного предпринимательства, совершенствование институциональных основ национальной экономики. отношения экономической безопасности.

Методология исследования.

В статье используются диалектический, системный, интегральный и синергетический подходы, экономическая, логическая, научная абстракция, анализ и синтез, индукция и дедукция, сравнение, обобщение, группировка и табличные методы.

Основные анализы и результаты.

Сегодня экономическое развитие государства определяется многими условиями и факторами. Поскольку экономическая система страны является частью мировой экономической системы, она ощущает на себе влияние не только национальных, но и глобальных проблем. Трансформация технологической системы под влиянием научно-технического прогресса оказывает глобальное влияние на формирование экономической системы. Несмотря на то, что экономика любой страны является открытой, поскольку она является неотъемлемой частью мирового хозяйства, в таких условиях проблема национальной экономической безопасности становится актуальной.

Процессы технологического развития и трансформация институциональных основ экономической безопасности взаимосвязаны: высокие темпы научно-технологического развития требуют соответствующих институциональных условий. При этом ее элементом является и институциональная структура, выступающая средством формирования новой технологической системы. Как отмечает российский учёный Е. Ясин, «если институциональная система будет прочно сложена и будет успешно поддерживать рыночные отношения (права собственности, конкуренцию, защиту контрактов), технологическая модернизация будет проходить беспрепятственно, будет формироваться интенсивный поток инноваций», и экономика оживится[5].

Процесс трансформации институциональной структуры в системе новых экономических отношений широко изучен узбекскими учеными. Например, по мнению Д.Тоджибаевой, «Цифровая экономика обусловлена не только интеллектуальным потенциалом человека, но и важным созданием институциональной среды, влияющей на деловую и потребительскую практику, формами и методами обеспечения экономических агентов, с информационными и коммуникационными компонентами» [7]. В этом отношении важен подход к цифровой

экономике, который отражен в даваемых ей определениях. Важно отметить, что цифровая экономика приведет к созданию новой институциональной среды, что в свою очередь приведет к повышению качества производства и популяризации цен на продукцию для обеспечения ее конкурентоспособности, к созданию соответствующей инфраструктуры.

Согласно Постановлению Президента Республики Узбекистан «О мерах по широкому внедрению цифровой экономики и электронного правительства» от 28 апреля 2020 года за № ПФ-4699, в 2022 году всего планируется реализовать 268 проектов[8]. Для определения векторов совершенствования институциональной структурной структуры экономики Узбекистана в условиях перехода к цифровой экономике необходимо оценить текущий уровень условий и факторов, влияющих на трансформацию. Во многих индексах, отражающих уровень развития официальных институтов, показатели Узбекистана достаточно низкие в связи с тем, что правовая основа реализуемых реформ не сформирована. Пробелы в законодательстве, бюрократия, слабая защита прав собственности, несовершенство судебной системы, серьезная коррупционная составляющая усложняют процесс трансформационных изменений, характерных для институциональной среды Республики Узбекистан.

Одним из приоритетных направлений совершенствования институциональных основ отношений экономической безопасности является развитие структур малого бизнеса, позволяющих преодолевать проблемы экономического развития. Современные малые предприятия способны создавать качественную продукцию и полностью покрывать потребности конкретной страны. В настоящее время структуры малого бизнеса в Республике Узбекистан также ориентированы на производство инновационной продукции, которая поможет экономике Узбекистана подняться на новый высокий уровень развития.

Роль малого бизнеса и частного предпринимательства в экономике и объективная необходимость его развития объясняются следующим: во-первых, малый бизнес и частное предпринимательство являются одними из основных отраслей, составляющих структуру мировой экономики, развитие этого сектора напрямую влияет на обеспечение экономической деятельности в стране. Кроме того, от развития этой отрасли зависят наполнение внутреннего рынка качественными потребительскими товарами, увеличение внешнеэкономической деятельности, обеспечение эффективной занятости населения и увеличение его реальных доходов. Во-вторых, в процессе глобализации и интеграции экономики, в условиях усиления конкуренции на мировом рынке именно малый бизнес требует меньше капитала по сравнению с крупными производителями, имеет возможность быстро адаптироваться к меняющимся требованиям

экономики. рыночной ситуации, а также возможности модернизации производственных мощностей [9].

Экономист П.З.Хошимов в своих научных взглядах определял безопасность предпринимательской деятельности как защиту субъекта предпринимательской деятельности на всех этапах его функционирования, прежде всего, от внутренних и внешних угроз, приводящих к экономическим, правовым и другим негативным последствиям[10]. Экономическая безопасность малого бизнеса и частного предпринимательства, основанная на оптимальном соотношении всех активов, позволяет предприятию вести стабильную деятельность, адекватно реагировать на трудности и угрозы, развиваться и совершенствоваться. Цели и задачи субъекта дают возможность сформировать приоритеты обеспечения экономической безопасности бизнеса. Мы также считаем, что малое предпринимательство и частное предпринимательство можно определить, оценивая следующие основные функциональные компоненты обеспечения экономической безопасности:

- значительное влияние факторов на функциональные компоненты;
- выявление влияния основных процессов, влияющих на обеспечение функциональных компонентов экономической безопасности;
- определение экономических показателей обеспечения функциональных составляющих экономической безопасности.

На наш взгляд, полная экономическая безопасность может быть достигнута за счет полного и эффективного использования внутренних ресурсов хозяйствующих субъектов. Для этого необходима эффективная организация управления ресурсами на всех уровнях и рациональное использование финансовых систем. Каждая из угроз, способных непосредственно повлиять на состояние экономической безопасности малого бизнеса и частного предпринимательства, наносит материальный, моральный и финансовый ущерб. Принятые меры и мероприятия по снижению и предотвращению выявленной угрозы позволяют свести ее к минимальному уровню.

В целях повышения эффективности экономической безопасности в малом бизнесе и частном предпринимательстве реализован комплексный подход по устранению угроз из десяти функциональных составляющих: финансовой, интеллектуальной, кадровой, технологической, правовой, энергетической, информационной и экологической. Эти факторы обеспечивают экономическую безопасность субъектов предпринимательства и обеспечивают стабильность, безопасность и финансовую устойчивость отрасли. Реализовать меры по защите субъекта от угроз можно путем определения основных стратегических направлений нейтрализации угроз экономической безопасности субъектов предпринимательства (см. таблицу 1).

Таблица 1

**Основные стратегические направления нейтрализации угроз в
повышении эффективности экономической безопасности малого
бизнеса и частного предпринимательства[11]**

№	Направление	№	Направление
1.	Регулярный мониторинг со своевременным обнаружением внутренних и внешних угроз	6.	Обеспечение технической и технологической безопасности
2.	Реализация мер по обеспечению полной экономической безопасности в области прогнозирования, планирования и стабилизации.	7.	Выявление факторов, влияющих на информационную безопасность, и принятие мер по их предотвращению.
3.	Расчет количественных и качественных значений показателей финансовой безопасности хозяйствующего субъекта и определение потенциала риска и опасностей в информационном поле	8.	Регламентирование хранения документов и рассмотрение меры по их сохранению.
4.	Контроль за информацией, составляющей коммерческую тайну хозяйствующего субъекта	9.	Эффективное принятие решений в управлении, рассмотрение мер стимулирования
5.	Осуществление профилактических мер	10.	Обеспечение физической защиты руководства и сотрудников компании

В целом система экономической безопасности и меры, обеспечивающие ее эффективное функционирование, должны постоянно обновляться и пересматриваться. Для эффективной реализации мер экономической безопасности в хозяйствующих субъектах необходимо одновременно выполнять контрольные и координационные задачи в целях обеспечения экономической безопасности. В целях повышения эффективности экономической безопасности в малом бизнесе и частном предпринимательстве возможна классификация угроз и оценка экономической безопасности на основе классификаций, а также повышение эффективности систем производства и обслуживание субъектов малого предпринимательства.

В результате реформ по развитию малого бизнеса и частного предпринимательства в Республике Узбекистан доля малого бизнеса и частного предпринимательства в валовом внутреннем продукте снизилась с 66,8 процента в 2016 году до 51,8 процента на сегодняшний день. Основная

причина снижения – увеличение объема добавленной стоимости в крупных субъектах предпринимательства. Здесь производится четверть всей промышленной продукции и 98,1% сельскохозяйственной продукции. Более 74 процентов нашего общего занятого населения работает в этом секторе. В 2022 году доля малого предпринимательства (бизнеса) в промышленности составила 25,9%, сельском, лесном и рыбном хозяйстве - 97,0%, строительстве - 72,4%, экспорте - 29,5%, импорте - 49,4% и 51,5% доля в сфере чего?

Таблица 2

Доля малого бизнеса и частного предпринимательства в отраслях экономики и его динамика [12]

№	Показатели	2016й	2017й	2018й	2019й	2020й	2021й	2022й
1.	ВВП	66,8	65,3	62,4	56,0	55,7	54,9	51,8
2.	Промышленность	45,3	41,2	37,4	25,8	27,9	27,0	25,9
3.	Сельское, лесное и рыбное хозяйство	98,6	98,5	98,3	97,9	96,7	96,0	95,3
4.	Сектор услуг	58,2	58,3	56,0	53,2	51,8	51,7	48,4
5.	Строительство	66,9	64,8	73,2	75,8	72,5	72,4	72,4
6.	Экспорт	26,0	22,0	27,2	27,0	20,5	22,3	29,5
7.	Импорт	46,8	53,6	56,2	61,6	51,7	48,7	49,4
6.	Занятость	78,2	78,0	76,3	76,2	74,5	74,4	74,4

В мировой практике ни одна страна мира, добившаяся высоких темпов экономического развития, не снизила значимость структур малого бизнеса в реализации политики, направленной на экономический рост. Структуры малого бизнеса важны для развития любой экономики, по сравнению с крупными и средними предприятиями они легче адаптируются к изменениям макроэкономической ситуации, что способствует сокращению оттока рабочей силы из определенного региона.

Сегодня структуры малого бизнеса все больше ориентированы на потребности потребителей, производят различные товары и услуги, характеризуются динамичным развитием и индивидуальными производственными особенностями. Ряд экономистов считают, что структуры малого бизнеса вводят конкуренцию на рынки, поскольку чем больше малых предприятий на рынках, тем ниже степень их монополизации. При этом крупный бизнес, как правило, стремится монополизировать рынок и ограничить механизм конкуренции.

Структуры малого бизнеса являются неотъемлемыми участниками инновационных процессов, реализуемых как в стране, так и за рубежом. Малые предприятия высоко динамичны и быстро адаптируются к инновациям, что позволяет им освоить производство инновационной продукции в гораздо более короткие сроки, чем средние и крупные предприятия. При этом малые предприятия наиболее уязвимы на рынке по сравнению со средними и крупными предприятиями, поскольку не

обладают крупным капиталом. Такая ситуация предполагает активную государственную поддержку развития малого бизнеса.

Государство оказывает существенное влияние на развитие структур малого бизнеса и формирует общие «правила игры» для всех хозяйствующих субъектов. Кроме того, взаимное сотрудничество бизнес-структур и государства позволяет «передать» часть функций государства бизнес-структурам, например, в рамках государственно-частного партнерства.

В условиях кризисных событий проблема экономической безопасности бизнес-структур становится актуальной. Высокий уровень налогов на бизнес-структуры, коррупционные правонарушения, снижение покупательной способности населения - все это влияет на уровень экономической безопасности государства. Отсутствие стабильности в развитии бизнес-структур негативно влияет на обеспечение экономической безопасности государства [13]. Наличие соответствующей институциональной среды, направленной на формирование конкурентоспособной экономики и развитие, отвечающее потребностям бизнес-структур, оказывает существенное влияние на институциональное обеспечение национальной экономической безопасности. Уровень инновационности государственной экономической системы также зависит от качества институциональной среды.

Таким образом, трансформация институциональной структуры происходит под влиянием экзогенных, эндогенных и комбинированных факторов. В условиях перехода к цифровой экономике можно отметить тенденцию приобретения реальных институтов виртуальной формы. В совершенствовании институциональных основ отношений экономической безопасности в Республике Узбекистан структуры малого бизнеса рассматриваются как экономическая основа развития не только отдельного региона, но и всей страны.

Выводы и предложения

1. Институциональной основой отношений экономической безопасности является совокупность взаимосвязанных формальных и неформальных институтов, которые систематизируют механизмы обеспечения стабильного, эффективного экономического развития и внедряют принципы, обеспечивающие пропорциональность интересов каждого из участников экономических отношений в государственном управлении.

2. Трансформация институциональной структуры происходит под влиянием экзогенных, эндогенных и комбинированных факторов. В условиях перехода к цифровой экономике можно отметить тенденцию приобретения реальных институтов виртуальной формы.

3. Одним из приоритетных направлений совершенствования институциональных основ отношений экономической безопасности являются структуры малого бизнеса и частного предпринимательства.

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*Мардонова Г.М.
Карши Халқаро Университети*

МАҲСУЛОТ (ИШ, ХИЗМАТЛАР) ТАННАРХИ КАЛЬКУЛЯЦИЯСИ, ТАҲЛИЛИ ВА УНИ ТАКОМИЛЛАШТИРИШ

Аннотация. Мазкур мақолада бошқарув ҳисоби ҳамда корхоналар фаолиятида калькуляциянинг тутган ўрни, маҳсулот таннархи харажатларини таркиби таҳлили ва уларни бошқаришни такомиллаштириши имкониятлари ёритилган.

Калит сўзлар: бошқарув ҳисоби, калькуляция маҳсулот таннархи, ишлаб чиқариш харажатлари, харажат, таннарх, молиявий натижа, фойдани максималлаштириши, рентабеллик кўрсаткичи, фойда.

*Mardonova G.M.
Karshi International University*

PRODUCT (WORK, SERVICES) COST CALCULATION, ANALYSIS AND ITS IMPROVEMENT

Abstract. This article describes the role of management accounting and calculation in the activities of enterprises, the analysis of the composition of product costs, and the possibilities of improving their management.

Key words: management accounting, product cost calculation, production costs, cost, cost, financial result, profit maximization, profitability indicator, profit.

Республикамизда инновацион ва рақамли иқтисодий ривожлантириш шароитида хўжалик субъектларини рақобатбардошлиги ва жозибдорлигини оширишда маҳсулот таннархини пасайтириш ва у билан боғлиқ харажатларни фойдага таъсирини доимий назорат қилиш молиявий барқарорликни таъминлашда муҳим аҳамият касб этади. 2023 йилга қадар рақамли иқтисодийнинг мамлакат ялпи ички маҳсулотидagi улушини 2 баробарга кўпайтириш электрон ҳукуматнинг кўшимча вазифалари этиб белгиланганлигини назарда тутган ҳолда, шу жумладан, маҳсулот яратиш ва ишлаб чиқаришни бошқаришда ахборот тизимлари комплексини жорий қилиш, молиявий хўжалик фаолиятда ҳисобот юритишда дастурий маҳсулотлардан кенг фойдаланиш, шунингдек, технологик жараёнларни автоматлаштириш орқали уни жадал шакллантириш микроиқтисодий даражадаги ишлаб чиқариш кўрастичларининг иқтисодийга таъсирини муҳимлигини ифодалайди.

2. Адабиётлар шарҳи.

Ихтисосликка оид адабиётларда таннарх ҳисоби ва таҳлилига оид турли ёнадувларни учратиш мумкин. Профессор А.П.Рудановский сётлар режаси таркибига бюджет сётларини киритиш таклифини илгари сурган ва ҳар бир хўжалик жараёнларини бюджет билан боғлаб мазкур жараённи бюджет деб атаган. Ҳорижий иқтисодий адабиётларда бошқарув ҳисоби тарихан капиталистик жамиятда тижорат сири яъни ишлаб чиқариш таркиби яширинлиги туфайли юзага келган ва шунинг учун баъзан “маҳфий ҳисоб” деб ҳам аталади, деган фикр учрайди.

Ушбу масалада айниқса хўжалик субъектларида таннарх таҳлили ва уни амалга ошириш тартиби бўйича иқтисодчи-олим Е.Ергешев томонидан шундай фикр билдирилган: Маҳсулот таннархини муттасил пасайтириб бориш учун ишлаб чиқариш харажатлар таркиби ва тузилишини, яъни маҳсулот таннархи мажмуасида ҳар бир харажатнинг тутган ўрнини билиш лозим. Таҳлил қилиш маҳсулот таннархининг бир неча йилги ўсиши ёки пасайишини ва асосий маҳсулот турларининг таннархини пасайтириш режасини бажаришга доир кўрсаткичларини текширишдан бошланади.

Шуни алоҳида таъкидлаш жоизки, ишлаб чиқаришда ҳажм кўрсаткичлари ичида маҳсулот ишлаб чиқариш ва сотиш ҳажми ўзига хос хусусиятга эга. Бу эса ушбу кўрсаткичларни уларни таҳлил қилиш усулларига ўзига хос ёндошувни талаб этади. Шуларни инобатга олиб, мазкур корхоналарда маҳсулот ишлаб чиқариш ва сотиш, таннарх, фойда каби натижавий кўрсаткичлар ҳамда рентабеллик, рақобатбардошлик каби нисбий кўрсаткичлар ўзгаришига таъсир қилувчи омиллар тизимини ишлаб

1-жадвал¹⁸⁶

Маҳаллий ва хорижлик олимларнинг бошқарув ҳисобига оид фикрлари

Т/р	Олимларнинг Ф.И.О	Фикрлар мазмуни
1	Аксарият олимлар	-бошқарув ҳисоби маълумотлари фақатгина корхона ичида фойдаланиш учун мўлжалланган ва тижорат сирига кирази -бошқарув ҳисоби маълумотлари бошқарув қарорларини қабул қилиш учун мўлжалланган ва улар орқали ишлаб чиқариш жарёнига фаол таъсир кўрсатиш мумкин

186 Ўзбекистон Республикаси Президентининг “Рақамли иқтисодиёт ва электрон ҳукуматни кенг жорий этиш чора-тадбирлари тўғрисида”ги ПҚ-4699-сонли Қарорининг 1 банди.

2	С.Николаева, Т.Карпова, В.Керимов, А.Шеремет ва бошқалар	-бошқарув ҳисоби ҳисобга олиш, меъёрлаштириш, режалаштириш, назорат қилиш ва таҳлил қилишни интеграллашган тизимини ўзида ифода этади; -бошқарув ҳисоби нафақат харажат ва натижалар ҳақидаги маълумотларни, балки бошқа объектларни ҳам (қайсики, улар ҳақидаги маълумотлар бошқарув қарорларини қабул қилиш учун керак бўладиган бўлса) акс эттиради -бошқарув ҳисобининг маълумотлари тезкор (Жорий фаолият ва келажак учун) ва стратегик бошқарув қарорларини қабул қилишда ишлатилади.
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3. Таҳлил ва натижалар муҳокамаси.

чиқиш, уларни ҳисоблаш йўллари кўрсатиб ўтиш ва таҳлил этиш методини ишлаб чиқиш мақсадга мувофиқ бўлади.

Маҳсулот таннарни корхонанинг нарх сиёсатига бевосита таъсир қилади. Шу нуқтаи назардан иқтисодчи-олимлар Н.Хасанов ва С.Нажбиддиновлар қуйидагича фикр билдиришган. “Сотилган маҳсулот рентабеллиги кўрсаткичи корхона нарх сиёсатининг имкониятларини белгилаб беради. Агар бу кўрсаткич жуда паст бўлса, корхона ўз маҳсулотларининг нархини арзонлаштира олмайди, чунки бунда зарар кўриб ишлай бошлайди.

Профессор К.М.Гарифуллиннинг яратган четланишлар таҳлили моделига кўра (1 расм) ўрганилган.

2. Бир бирлик маҳсулот ишлаб чиқариш учун сарфланган маблағларнинг ҳақиқий баҳода ҳисобланган миқдори $Mx + Bx$	1. Бир бирлик маҳсулот ишлаб чиқариш учун сарфланган маблағларнинг норматив баҳода ҳисобланган ҳақиқатдаги миқдори $Mx + Bn$	3. Ишлаб чиқариш ҳажми учун сарфланган маблағларнинг норматив баҳода ҳисобланган норматив миқдори $Mn + Bn$
Баҳо бўйича четланишлар	Миқдор бўйича четланишлар	

Тўлиқ дисперсиянинг миқдори

1. Ҳарид қилинган материалларнинг баҳоси бўйича четланишлар 2. Меҳнат ҳақи бўйича четланишлар 3. Ўзгарувчан устама харажатларнинг харажат сифими	1. Материаллар миқдори (сарфи) бўйича четланишлар 2. Меҳнат сифими бўйича четланишлар 3. Ўзгарувчан устама харажатлар самарадорлиги бўйича четланишлар
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1-расм. Четланишлар таҳлили модели¹⁸⁷

187 Махсудов Б. (2018) Бошқарув ҳисобида бюджетлаштириш услубиетини такомиллаштириш//Диссертация.-Т.

Сотилган маҳсулот рентабеллиги сотишдан ялпи фойданинг сотилган маҳсулотнинг ишлаб чиқариш таннархига нисбати орқали аниқланади. Сотилган маҳсулот рентабеллигининг икки кўрсаткичи таққосланганда давр харажатлари ва асосий ишлаб чиқариш билан боғланмаган молиявий фаолият харажатлари сотишдан тушган фойда суммасига қанчалик таъсир кўрсатишини таҳлил қилиш имконини беради”. 188

4. Хулоса ва таклифлар.

Бошқарув ҳисобининг умумий тактикаси яъни жорий даврда ишлаб чиқаришни ташкил этиш, далиллаш, қабул қилинган қарорларни таҳлил ва назорат қилиш, шунингдек, калькуляциялаш усуллари ва уни тузишдаги муаммолар юзасидан олиб борилган тадқиқотлар натижасида қуйидаги таклифлар ишлаб чиқилди:

– ривожланган мамлакатлар тажрибасига асосан, йирик ишлаб чиқариш ҳажмига эга корхонларда умумий маълумотларни қамраб олувчи “информацион-микромухит” яратиш;

– калькуляция қилиш усулларини ишлаб чиқаришга мослиги юзасидан баҳолашда бошқарув ҳисобини дастурий натижавийлигини таъминловчи автоматлаштирилган тизим яратиш.

Адабиётлар:

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188 “Халқаро молия ва ҳисоб” илмий электрон журнали. № 3, июнь, 2018 йил

*Мирхамидова З.М.
докторант 1-го курса
направление «Экономическая теория»
Гулистанский государственный университет*

ВЛИЯНИЕ РОБОТИЗАЦИИ И АВТОМАТИЗАЦИИ РАБОЧИХ МЕСТ НА ЭКОНОМИЧЕСКИЙ РОСТ В КОНТЕКСТЕ ЧЕТВЕРТОЙ ПРОМЫШЛЕННОЙ РЕВОЛЮЦИИ

Аннотация. Четвертая промышленная революция, обусловленная стремительным развитием искусственного интеллекта, робототехники и других передовых технологий, оказывает глубокое влияние на рынок труда, посредством автоматизации и роботизации рабочих.

В данной работе анализируется влияние положительных и отрицательных аспектов роботизации и автоматизации на экономический рост, таких как повышение производительности, снижение затрат, улучшение качества продукции, потеря рабочих мест, рост безработицы и усугубление социального неравенства. В работе также рассматривается, как правительства и компании могут максимизировать положительные эффекты роботизации и автоматизации, минимизируя негативные последствия.

Делается вывод, что роботизация и автоматизация являются неизбежным трендом, который необходимо учитывать при разработке экономической политики.

Ключевые слова: роботизация, автоматизация, четвертая промышленная революция, экономический рост, производительность труда.

*Mirkhamidova Z.M.
1st year doctoral student in Economic Theory
Gulistan State University*

IMPACT OF ROBOTICS AND JOB AUTOMATION ON ECONOMIC GROWTH IN THE CONTEXT OF THE FOURTH INDUSTRIAL REVOLUTION

Abstract. The fourth industrial revolution, driven by the rapid development of artificial intelligence, robotics and other advanced technologies, is having a profound impact on the labour market, through the automation and robotisation of workers.

This paper analyses the impact of the positive and negative aspects of robotisation and automation on economic growth, such as increased productivity, lower costs, improved product quality, job losses, increased unemployment and

worsening social inequality. The paper also examines how governments and companies can maximise the positive effects of robotisation and automation while minimising the negative effects.

It is concluded that robotisation and automation is an inevitable trend that needs to be taken into account in economic policy making.

Keywords: robotisation, automation, fourth industrial revolution, economic growth, labour productivity.

Одной из ключевых технологий четвертой промышленной революции является робототехника и автоматизация. Роботы и автоматизированные системы трансформируют рабочие процессы в различных отраслях, от производства до медицины, что позволяет снижать трудозатраты, увеличивать точность и повышать безопасность производства.

Цифровая трансформация на рабочих местах требует многоуровневого подхода с учетом индивидуальных, групповых и организационных факторов для адаптации к технологическим изменениям и поддержания конкурентоспособности¹⁸⁹.

При написании данной работы были использованы теоретические методы как абстрагирование, анализ и синтез, эмпирические методы как сравнения, а также методы статистического анализа.

Согласно отчету Fortune Business Insights, ожидается, что мировой рынок автоматизации роботизированных процессов вырастет с 13,86 млрд долларов США в 2023 году до 50,50 млрд долларов США в 2030 году, при среднем росте на 20,3% в течение прогнозируемого периода¹⁹⁰. В другом недавнем отчете Acumen Research and Consulting говорится, что мировой рынок автоматизации рабочих процессов к 2030 году превысит 78 миллиардов долларов США¹⁹¹. Данные технологии также позволяют освободить людей от монотонной и опасной работы, способствуя росту их эффективности и творческому потенциалу.

Определения роботизации и автоматизации, а также их отличительные черты по уровню сложности, примеры применения, преимущества, недостатки и перспективы применения представлены в сравнительном контексте в таблице 1.

Таблица 1

Сравнительная таблица роботизации и автоматизации

Критерий	Роботизация	Автоматизация
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189 Trenerry, Brigid et al. "Preparing Workplaces for Digital Transformation: An Integrative Review and Framework of Multi-Level Factors." *Frontiers in Psychology*, 12 (2021). <https://doi.org/10.3389/fpsyg.2021.620766>

190 Fortune Business Insights. URL: <https://www.fortunebusinessinsights.com/>

191 Acumen Research and Consulting. URL: <https://www.acumenresearchandconsulting.com/>

Определение	Использование роботов для выполнения задач, ранее выполняемых людьми.	Использование компьютеров и других технологий для выполнения задач, ранее выполняемых людьми.
Уровень сложности	Более высокий уровень сложности, так как роботы могут выполнять более широкий спектр задач, чем автоматизированные системы.	Более низкий уровень сложности, так как автоматизированные системы обычно предназначены для выполнения одной или нескольких конкретных задач.
Примеры применения	Производство, логистика, медицина, сельское хозяйство.	Офисная работа, обслуживание клиентов, бухгалтерский учет, анализ данных.
Преимущества	Повышение производительности, точности и безопасности работы, снижение затрат, возможность работы в опасных или некомфортных условиях.	Повышение производительности, точности и эффективности работы, снижение затрат, освобождение людей от выполнения рутинных задач.
Недостатки	Высокая стоимость внедрения, риск потери рабочих мест, этические проблемы, связанные с использованием роботов.	Ограниченная гибкость, зависимость от программного обеспечения, риск сбоев и ошибок.
Перспективы развития	Развитие искусственного интеллекта и машинного обучения будет способствовать дальнейшему совершенствованию робототехники и расширению сферы ее применения.	Развитие облачных технологий и Интернета вещей будет способствовать распространению автоматизированных систем.

Источник: составлено автором

Необходимо отметить, что роботизация и автоматизация часто используются вместе. Например, робот на заводе может быть оснащен автоматизированной системой управления, которая позволяет ему выполнять задачи более точно и эффективно.

В статье "Исследование влияния роботизации на экономическое развитие" отмечается, что «Роботизация уничтожает рабочие места, но увеличивает время, доступное для потребления, что приводит как к росту, так и к снижению экономической активности, причем бум может быть вызван ростом спроса на время и трудоемкие услуги»¹⁹².

Джо-Чинг Чунг и Йонг Сук Ли в статье "Эволюционное влияние роботов на рабочие места" утверждают, что воздействие роботов снижает занятость в более ранние периоды, но увеличивает занятость в более

192 S. Mitra and Mousumi Das. "Exploring the Impact of Robotisation on Economic Development." *International Journal of Economics, Business and Management Studies* (2022). <https://doi.org/10.55284/ijebms.v9i1.626>

поздние периоды, что положительно сказывается на местной заработной плате¹⁹³.

Исходя из выше сказанного можно обобщить, что в краткосрочной перспективе роботизация может привести к безработице, но в долгосрочной перспективе может создать новые рабочие места и повысить заработную плату. Также необходимо учитывать влияние роботизации на разные группы населения и регионы, чтобы минимизировать негативные последствия и максимизировать преимущества. Рассмотрим дифференциацию роботизации по регионам мира по гистограмме 1 и 2.

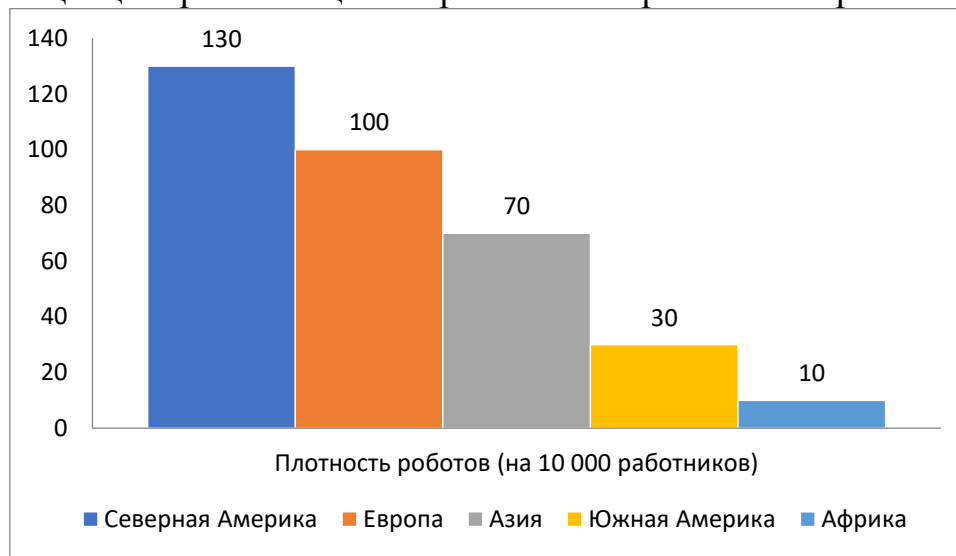


Рисунок 1 - Уровень роботизации в разных регионах мира на начало 2024 год (плотность роботов на 10 000 работников)

Источник: составлено автором на основании данных Международной федерации робототехники (IFR) ¹⁹⁴, Всемирного экономического форума¹⁹⁵ и ООН¹⁹⁶.

193 Jo-Ching Chung and Yong Suk Lee. "The Evolving Impact of Robots on Jobs." *ILR Review*, 76 (2022): 290 - 319. <https://doi.org/10.1177/00197939221137822>

194 Международная федерация робототехники (IFR). URL: <https://ifr.org/worldrobotics>

195 Всемирный экономический форум (WEF) URL: <https://www.weforum.org/agenda/future-of-work/>

196 Официальный сайт ООН URL.: <https://data.un.org/>

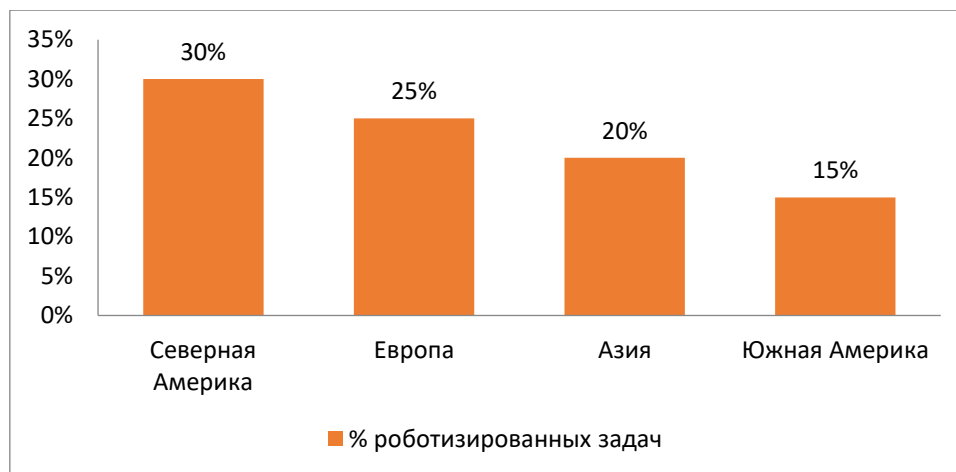


Рисунок 2 – Процент роботизированных задач в разных регионах мира на начало 2024 год

Источник: составлено автором на основании данных Международной федерации робототехники (IFR) 197, Всемирного экономического форума 198 и ООН 199.

Изучив выше представленные гистограммы о роботизации в разных регионах мира на начало 2024 года можно сделать следующие выводы о том, что Северная Америка является лидером по роботизации. Плотность роботов в этом регионе составляет 130 на 10 000 работников, что означает, что на каждые 10 000 работников приходится 130 роботов. 30% задач в Северной Америке уже роботизированы.

Европа находится на втором месте по уровню роботизации. Плотность роботов в Европе составляет 100 на 10 000 работников. 25% задач в Европе уже роботизированы.

Азия занимает третье место по уровню роботизации. Плотность роботов в Азии составляет 70 на 10 000 работников. 20% задач в Азии уже роботизированы.

Южная Америка и Африка отстают по уровню роботизации. Плотность роботов в Южной Америке составляет 30 на 10 000 работников, а в Африке - 10. В Южной Америке роботизировано 15% задач, а в Африке - 5%.

Разрыв между регионами по уровню роботизации постепенно сокращается. В последние годы темпы роста роботизации в Азии опережают темпы роста в Северной Америке и Европе.

Роботизация и автоматизация рабочих мест, являясь ключевыми компонентами четвертой промышленной революции (Индустрии 4.0), обусловленной внедрением передовых цифровых технологий во всех

197 Международная федерация робототехники (IFR). URL: <https://ifr.org/worldrobotics>

198 Всемирный экономический форум (WEF) URL: <https://www.weforum.org/agenda/future-of-work/>

199 Официальный сайт ООН URL.: <https://data.un.org/>

сферах жизни, оказывают комплексное влияние на **экономический рост**, которое имеет как **позитивные**, так и **негативные** аспекты.

Таблица 2

Позитивные и негативные аспекты роботизации и автоматизации производства

Позитивные аспекты роботизации и автоматизации производства	Негативные аспекты роботизации и автоматизации производства
Повышение производительности труда. Роботы и автоматизированные системы способны выполнять задачи быстрее, точнее и дешевле, чем люди, что приводит к снижению издержек и росту производительности.	Безработица. Автоматизация может привести к потере рабочих мест в тех секторах, где задачи легко поддаются автоматизации.
Создание новых рабочих мест. Развитие роботизации и автоматизации стимулирует создание новых рабочих мест в сферах, связанных с разработкой, обслуживанием и эксплуатацией этих технологий.	Неравенство. Преимущества от роботизации и автоматизации могут быть неравномерно распределены между различными группами населения. Люди с низким уровнем образования и навыками окажутся более уязвимыми к негативным последствиям этих процессов.
Новые продукты и услуги. Автоматизация открывает новые возможности для создания инновационных продуктов и услуг, что стимулирует экономический рост.	Социальные проблемы. Массовая безработица может привести к росту социальной напряженности, преступности и другим негативным явлениям.

Источник: составлено автором

Влияние роботизации и автоматизации на экономический рост в конечном итоге будет зависеть от ряда факторов, таких как:

1. **Скорость внедрения этих технологий.** Чем быстрее будут внедряться роботизация и автоматизация, тем сильнее будет их влияние на рынок труда и экономику в целом.

2. **Квалификация рабочей силы.** Уровень образования и навыков работников будет играть ключевую роль в их способности адаптироваться к новым условиям рынка труда.

3. **Государственная политика.** Правительствам стран необходимо будет разработать и реализовать эффективные меры по поддержке работников, пострадавших от роботизации и автоматизации, а также по стимулированию создания новых рабочих мест.

Для того, что бы понять воздействия роботизации и автоматизации на мировую экономику рассмотрим такие показатели как количество роботов

в промышленности, инвестиции в роботизацию и автоматизацию, влияние роботизации и автоматизации на производительность труда и на занятость.

Таблица 3

Количество роботов в промышленности с 2020 по 2023 гг.

Год	Количество роботов в промышленности (тыс. шт.)	CAGR (2020-2023)
2020	2,7 млн	11,20%
2021	3,1 млн	14,80%
2022	3,5 млн	13,50%
2023	3,9 млн	11,10%

Источник: Международная федерация робототехники (IFR)200

Количество роботов в промышленности увеличилось с 2,7 млн в 2020 году до 3,9 млн в 2023 году. Совокупный среднегодовой темп роста за период 2020-2023 гг. составил 12,4%, что выше общемирового совокупного среднегодового темпа роста для рынка робототехники (8,7%).

Таблица 4

Инвестиции в роботизацию и автоматизацию с 2020 по 2023 гг.

Год	Инвестиции в роботизацию и автоматизацию (млрд. долл. США)	CAGR – совокупный среднегодовой темп роста (2020-2023)
2020	465	12,40%
2021	530	14,00%
2022	605	14,20%
2023	690	14,10%

Источник: Research and Markets201

Инвестиции в исследования и разработки в области робототехники демонстрируют устойчивый рост. Объем инвестиций в роботизации и автоматизации увеличился с 465 млрд. долларов США в 2020 году до 690 млрд в 2023 году. Совокупный среднегодовой темп роста за период 2020-2023 гг. составил 13,6%, что выше общемирового совокупного среднегодового темпа роста для инвестиций в роботизацию и автоматизацию (9,3%).

Таблица 5

Влияние роботизации и автоматизации на производительность труда с 2020 по 2023 гг.

Год	Средний рост производительности труда за счет роботизации и автоматизации (%)
2020	1,50%

200 Международная федерация робототехники (IFR). URL: <https://ifr.org/worldrobotics>

201 Research and Markets. URL: <https://www.researchandmarkets.com/categories/robotics>

2021	2,00%
2022	2,50%
2023	3,00%

Источник: McKinsey Global Institute²⁰²

Средний рост производительности труда за счет внедрения результатов исследований и разработок роботизации и автоматизации в области робототехники увеличился с 1,5% в 2020 году до 3,0% в 2023 году.

Таблица 6

Влияние роботизации и автоматизации на занятость с 2020 по 2023 гг.

Год	Прогнозируемое количество рабочих мест, потерянных из-за роботизации и автоматизации (млн)
2020	800
2021	900
2022	1000
2023	1100

Источник: Oxford Economics²⁰³

Количество потерянных рабочих мест из-за внедрения роботизации и автоматизации увеличилось с 800 млн. в 2020 году до 1100 млн. в 2023 году.

На рост роботизации и автоматизации могут повлиять различные факторы, такие как экономические условия, технологические достижения и государственная политика. Проблемы, которые могут возникнуть при внедрении роботизации и автоматизации:

1. Высокие первоначальные затраты. Закупка роботов, программного обеспечения, обучение персонала и другие расходы могут быть значительными, что делает роботизацию недоступной для некоторых предприятий.

2. Изменение структуры занятости. Автоматизация может привести к сокращению рабочих мест в некоторых отраслях, что может вызвать социальную напряженность и безработицу.

3. Необходимость переквалификации. Сотрудникам, чьи задачи будут автоматизированы, потребуется переквалификация для работы с новыми технологиями.

4. Сложность интеграции. Интеграция роботов и автоматизированных систем с существующими бизнес-процессами может быть сложной и трудоемкой.

²⁰² McKinsey Global Institute. URL: <https://www.mckinsey.com/>

²⁰³ Oxford Economics. Как роботы меняют мир. URL: <https://www.oxfordeconomics.com/resource/how-robots-change-the-world/>

5. Техническое обслуживание и ремонт. Роботы и автоматизированные системы требуют регулярного технического обслуживания и ремонта, что является дорогостоящим.

6. Кибербезопасность. Автоматизированные системы могут быть уязвимы к кибератакам, что может привести к потере данных и финансовым убыткам.

7. Сопротивление изменениям. Некоторые люди могут негативно относиться к роботизации и автоматизации из-за страха замены людей технологиями.

8. Этические вопросы. Использование роботов и автоматизированных систем может поднимать этические вопросы, такие как вопросы ответственности, безопасности и дискриминации.

9. Социальная изоляция. Чрезмерная автоматизация может привести к социальной изоляции людей из-за меньшего взаимодействия друг с другом.

10. Вопросы ответственности. Необходимо четкое определение ответственности за ущерб, причиненный роботами или автоматизированными системами.

11. Защита данных. Необходимым является обеспечение защиты персональных данных, которые собираются и обрабатываются роботами и автоматизированными системами.

12. Интеллектуальная собственность. Целесообразно решение вопросов владения интеллектуальной собственностью, связанной с разработкой и использованием роботов и автоматизированных систем.

Важно отметить, что эти проблемы не являются непреодолимыми. При тщательном планировании, внедрении и управлении рисками роботизация и автоматизация могут принести значительные выгоды для предприятий и общества в целом.

Таблица 7

Максимизация положительных эффектов и минимизация негативных последствий роботизации и автоматизации со стороны правительства и компаний

	Рекомендации	Описание рекомендаций
Правительства	Инвестиции в образование и переподготовку кадров	Помощь людям в получении новых навыков, необходимых для работы в условиях автоматизированной экономики.
	Создание программ социальной поддержки	Помощь людям, потерявшим работу из-за автоматизации, найти новую работу или начать собственный бизнес.
	Регулирование использования роботов и алгоритмов	Обеспечение этичного и справедливого использования этих технологий.

	Стимулирование инноваций	Поддержка исследований и разработок в области новых технологий, которые могут создать новые рабочие места.
Компании	Внедрение роботизации и автоматизации постепенно	Дать людям время для адаптации к изменениям.
	Инвестиции в обучение и развитие сотрудников	Помочь сотрудникам развить новые навыки, необходимые для работы с роботами и алгоритмами.
	Обеспечение прозрачности	Объяснение сотрудникам, как роботизация и автоматизация повлияют на их работу.
	Создание новых рабочих мест	Создание новых рабочих мест, которые не могут быть автоматизированы.
Все стороны	Повышение осведомленности о роботизации и автоматизации	Объяснение общественности потенциальных преимуществ и рисков этих технологий.
	Содействие диалогу между правительствами, компаниями и профсоюзами	Разработка совместных стратегий максимизации положительных эффектов роботизации и автоматизации.

Источник: составлено автором

Целесообразно отметить, что внедрение роботизации и автоматизации должно проходить с учетом интересов всех сторон. Необходимо максимизировать положительные эффекты этих технологий и минимизировать негативные последствия. В целом, роботизация и автоматизация могут стать мощным двигателем экономического роста, но только в том случае, если их внедрение будет проходить с умом.

Таким образом, роботизация и автоматизация рабочих мест становятся все более распространенными явлениями, что оказывает как положительное, так и отрицательное влияние на экономический рост. С одной стороны, роботизация и автоматизация могут привести к повышению производительности труда, снижению издержек производства и улучшению качества продукции. С другой стороны, роботизация и автоматизация могут привести к потере рабочих мест, увеличению безработицы и усугублению социального неравенства.

Влияние роботизации и автоматизации на экономический рост в конечном итоге будет зависеть от ряда факторов, таких как скорость внедрения этих технологий, квалификация рабочей силы и государственная политика. Правительства и компании должны принимать меры для максимизации положительных эффектов роботизации и автоматизации, минимизируя негативные последствия.

К таким мерам относятся инвестиции в образование и переподготовку кадров, создание программ социальной поддержки, регулирование использования роботов и алгоритмов, стимулирование инноваций, постепенное внедрение роботизации и автоматизации, инвестиции в обучение и развитие сотрудников, обеспечение прозрачности, создание

новых рабочих мест, повышение осведомленности о роботизации и автоматизации, содействие диалогу между правительствами, компаниями и профсоюзами. Внедрение роботизации и автоматизации должно проходить с учетом интересов всех сторон. Необходимо максимизировать положительные эффекты этих технологий и минимизировать негативные последствия. Роботизация и автоматизация могут стать мощным двигателем экономического роста, но только в том случае, если их внедрение будет проходить с умом. Данные показывают, что роботизация и автоматизация являются одним из ключевых трендов, который будет формировать будущее промышленности в ближайшие годы.

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*Мусаева Г.М., PhD
кафедра “Карантин и защита растений”
Андижанский институт сельского хозяйства и агротехнологий*

ВЛИЯНИЕ СЕВООБОРОТА НА РАСПРОСТРАНЕНИЕ БОЛЕЗНЕЙ ОЗИМОЙ ПШЕНИЦЫ

Аннотация. Для повышения плодородия почв за счет внедрения широкомасштабных севооборотов в защите растений, рекомендовать производство оптимальных систем борьбы с болезнями растений.

Ключевые слова: севооборот, эффективность, патоген, система.

*Musaeva G.M., PhD
Department of “Quarantine and Plant Protection”
Andijan Institute of Agriculture and Agricultural Technologies*

INFLUENCE OF CROPE ROTATION ON THE SPREAD OF DISEASES IN WINTER WHEAT

Annotation. To increase soil fertility through the introduction of large-scale crop rotations in plant protection, recommend the production of optimal systems for combating plant diseases.

Key words: crop rotation, efficiency, pathogen, system.

Разработка и внедрение усовершенствованных систем севооборота поддерживающих и повышающих плодородие почв в условиях светло-серых почв Андижанской области, обеспечивающих высокие урожаи хлопчатника и пшеницы является важным в условиях ведения современного земледелия в производстве сельскохозяйственной продукции. Проблема повышения урожайности и валовых сборов озимой пшеницы с высоким технологическим качеством зерна в современных условиях ведения земледелия приобрела важное народно-хозяйственное значение. Её решение в значительной мере определяется рациональным использованием пашни в севооборотах, подбором предшественников и совершенствованием технологии возделывания для данной культуры, биологизацией земледелия, а также использованием новых высокоурожайных сортов. В последние годы в результате масштабного севооборота хлопка и зерна в сельском хозяйстве снизилось плодородие почвы в хозяйствах региона, снизился ее природный ресурс - гумус, снизилась урожайность, увеличились болезни сельскохозяйственных культур.

Рациональное планирование объёмов обработок при проведении защитных мероприятий против болезни зерновых культур является одним

из важных факторов по профилактической защите. Целесообразна разработка планирования объёмов обработок по защите, проводимых против вредных организмов на зерновых культурах в условиях нашей республики. Это планирование, предусмотренное на один год, или же на один сезон и предусмотренное на несколько лет. Эти виды планирования основываются на прогнозировании распространения и развития вредных организмов на зерновых.

Севооборот – это системное решение одной из основных задач ведения сельскохозяйственного производства: рациональное использование земельных угодий с учетом их возможно эффективной плодородности, биологического потенциала культурных растений и имеющихся внешних и внутренних ресурсов с целью ведения наиболее экономически эффективного управления, которое возможно при получении стабильно высоких урожаев, с последовательным воспроизводством почвенного плодородия и охраной внешней среды.

Основная цель нашего эксперимента - повысить плодородие почвы за счет внедрения новых систем севооборота, увеличения в нем гумуса и питательных веществ, уменьшения количества болезнетворных грибов в почве, определения непрерывных высокоурожайных режимов сельскохозяйственных культур и рекомендации оптимальных систем.

Почва опытного поля светло-серая, изначально орошаемая, не засоленная. По механическому составу песок средний. Подземные воды находятся на глубине 4-5 м над землей.

Количество исходного гумуса в почве составляло 0,6%, азота общего 0,16-0,05%, фосфора 0,15-0,13%, калия 1,84-1,78%.

Эксперимент состоял из 1 повторения, 3 вариантов. На площади 450 м² севооборота засеяно пшеница сорта «Крошка».

Зерновые культуры в системах севооборота выращивались в удобренной и не удобренной среде. Норма минеральных удобрений в среде удобрений пшеницы была следующей: NPK 200-150-100 кг / га.

По результатам анализа количество гумуса в вариантах попеременного посева хлопчатника пшеницы (2-3 вар) зависит от урожайности пшеницы.

мы наблюдали относительный рост (0,812-0,852%).

Известно, что в светло-серых почвах нитрат аммония быстро превращается в нитратный азот благодаря тому, что он выделяется при внесении пшеницы.

Во всех севооборота наблюдалось, что количество нитратов в пахотном слое почвы накапливалось больше, чем в нижнем слое. По общему содержанию азота в почве разницы между вариантами практически не было.

Известно, что норма внесения калия с фосфором определяется количеством подвижного фосфора в почве (16-30 мг / кг) и количеством обменного калия (100-200 мг/кг). Соответственно, в эксперименте

количество подвижного фосфора и обменного калия оставалось стабильным в движущих слоях при чередовании режимов посева, в то время как общее содержание фосфора несколько снижалось на второй год эксперимента.

По результатам эксперимента кущение растений в ряду хлопчатник-пшеница короткого севооборота (1: 1) было выше (2,2 и 2,4 куста), чем в единичном посеве пшеницы. Было отмечено, что на 1 м² приходится 289 и 348 семян.

Растения у однокультурного варианта пшеницы стали медленно расти, листья желтеют. К 1 июня растения этого варианта достигли высоты 53,7 см. Длина колос 5,7 см. Напротив, в удобренном варианте растения хорошо росли и достигли высоты 72 см. Отмечена длина колосов 8 см.

В варианте удобренной среды (2-3 вар) порядка севооборота хлопок-пшеница (1: 1) эти значения для систем составили 85,4 см и 9,1 см и 64,0 см и 8,9 см соответственно. Ценные экономические показатели пшеницы также улучшились в результате этих процедур.

Рост и урожайность озимой пшеницы

№	Варианты опыта	1.05		1.06		Количество зерна в одном колосе, шт.	Масса 1000 шт. семян, гр.	Урожай зерна, ц/га
		Высота растений, см	Количество листьев в одном растении	Высота растений, см	Количество листьев в одном растении			
1	Контроль (без севооборота)	64.9	4.1	72.0	8.0	39.6	36.5	37.9
2	1 хлопок: 1 пшеница (без удобрений)	57.2	3.8	65.0	6.5	33.0	43.5	42.0
3	1 хлопок: 1 пшеница (с удобрениями)	78.7	4.3	85.4	9.1	50.0	48.5	51.0

В частности, количество зерен в зерне было на 10,4-11,4 больше, чем в единичном зерне пшеницы, вес зерна на зерно составлял 0,4-0,5 грамма, а вес 1000 зерен составлял 4,5-7,0 грамма. 50-51 центнеров на гектар, то есть на 12,1-13,1 центнеров / га больше, чем одна культура.

Урожайность озимой пшеницы также была высокой во втором и третьем вариантах - 95,2-95,6%. Кроме того, стебли и корневые остатки пшеницы также были выше, чем в контрольном варианте в той же среде удобрений. В соответствии с программой развития сельского хозяйства в увеличении производства зерна предстоит освоение новых ресурсосберегающих технологий возделывания зерновых культур, в том числе и озимой пшеницы, которые позволят увеличить урожайность, улучшить качественные показатели зерна и снизить его себестоимость.

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*Мухаммадиев Б.С.
старший преподаватель
Джизакский политехнический институт
Мухаммадиева М.Б.
студент 3 курса
УзГУФКиС*

ВНЕДРЕНИЕ ЦИФРОВЫХ ТЕХНОЛОГИЙ В ПРОИЗВОДСТВАХ АГРОПРОМЫШЛЕННОГО КОМПЛЕКСА

Аннотация. В данной статье рассмотрены приоритетные задачи внедрения цифровых технологий в сельское хозяйства, где цель реализации комплекса мер по внедрению высоких технологий, в том числе цифровизации в сельскохозяйственное производство, направленно на повышение урожайности сельскохозяйственных культур, продуктивности животных, снижению себестоимости, улучшения процессов хранения и переработки сельскохозяйственной продукции, создание логистических и торговых центров.

Ключевые слова: агропромышленный комплекс (АПК), цифровая технология, производства, автоматизированные технологии, сельское хозяйства, цифровизация, эффективность, производительность, урожайность.

*Mukhammadiev B.S.
senior lecturer
Jizzakh Polytechnic Institute
Mukhammadieva M.B.
student of the third year
UzGUFKiS*

IMPLEMENTATION OF DIGITAL TECHNOLOGIES IN PRODUCTION OF THE AGRICULTURAL COMPLEX

Annotation. This article discusses the priority tasks of introducing digital technologies in agriculture, where the goal is to implement a set of measures to introduce high technologies, including digitalization in agricultural production, aimed at increasing crop yields, animal productivity, reducing costs, improving the processes of storage and processing of agricultural products, creating logistics and shopping centers.

Keywords: agro-industrial complex, digital technology, production, automated technologies, agriculture, digitalization, efficiency, productivity, productivity.

Эффективность экономических и социальных реформ в республике во многом зависит от уровня развития сетей агропромышленного комплекса.

Основная цель деятельности агропромышленного комплекса это производство, заготовка, переработка продукции и целевая система взаимосвязанных поставок потребителям, обеспечивающая стабильную работу в соответствии с единой нормой, а также создание экономических механизмов, способных удовлетворять потребности и увеличение качественной продукции.

В Постановлении КМ РУз. “О мерах по развитию системы цифровизации в агропромышленном комплексе и сельском хозяйстве Республики Узбекистан” от 17 декабря 2020 года за № 794 отмечены приоритетные направления цифровизации аграрного сектора Республики Узбекистан:

- внедрение ведомственных и межведомственных информационных систем для эффективного использования земель сельскохозяйственного назначения, водных ресурсов и контроля состояния посевов;

- перевод услуг, предоставляемых организациями агропромышленного комплекса, в том числе государственных, в полностью электронный вид;

- реализация целевых проектов на условиях государственно-частного партнерства по внедрению современных информационно-коммуникационных технологий в сфере сельского хозяйства [1].

А также в стратегии развития технологий "Умного сельского хозяйства" определены следующие долгосрочные основные направления:

- внедрение цифровых и геоинженерных технологий в использование сельскохозяйственных земель;

- организация интенсивных садов и внедрение автоматизированных технологий управления при выращивании плодоовощной продукции;

- внедрение автоматизированных, компьютеризированных интеллектуальных технологий в тепличных хозяйствах;

- внедрение автоматизированных технологий в сфере животноводства и птицеводства;

- внедрение современных технологий в процессы хранения и переработки сельскохозяйственной продукции, создание логистических и торговых центров, оснащенных современными информационно-коммуникационными технологиями;

- подготовка и переподготовка квалифицированных кадров по технологиям "Умного сельского хозяйства" для всех сфер сельского хозяйства, формирование нормативной базы для внедрения новых технологий.

Главной тенденцией развития образования становится информационный характер образовательных процессов. В мире высоких

технологий постоянно растёт потребность в высококвалифицированных технических специалистах. [2,3].

Основной задачей при внедрения цифровой технологии в сельское хозяйства является извлечение информации из собираемых данных и обработов информацию, принятия верного решения. Например, применение сенсорного оборудования (полевые датчики, датчики контроля состояния производственных помещений, сельхозоборудования и техники, датчики контроля здоровья скота и пр.) позволяют большому числу сельхозпредприятий перейти к непрерывному сбору и анализу информации и интегрировать на уровне отдельных фермерских хозяйств, регионов и страны.

Когда речь заходит о цифровизации сельского хозяйства, целесообразно проводить, опираясь на передовой опыт стран. Переход к "умному" сельскому хозяйству в мире происходит медленно, но на этом пути достигается надежность [4].

Цифровизация аграрного сектора нивелирует его недостатки, связанные с потерями урожая при непредсказуемой погоде, выращивании, сборе и хранении, позволяет оперативно проводить мониторинг посевных площадей.

Развивающаяся ускоренными темпами современная наука диктует сближение умственного и физического труда, то есть устранение разницы между ними. Об этом свидетельствует тот факт, что труд рабочих все больше приобретает инженерно-технический характер [5,6].

На основе использования достижений науки и техники необходимо ускорить внедрение систем автоматического управления с использованием современных микропроцессоров и микро-ЭВМ, внедрение автоматизированных методов и средств контроля качества и испытания продукции как составной части технологических процессов [7,8,9]

Подводя итог, можно сказать, что цифровые технологии способны коренным образом улучшить отрасли народного хозяйства, в том числе сельского хозяйства, поскольку цифровая трансформация являются главным приоритетом.

В данном случае, для развития цифровизации отрасли АПК предлагается сосредоточить внимание на следующем:

- программном обеспечении, аппаратных средствах, телекоммуникациях и улучшениях инфраструктуры, которые включают в себя другие;
- ускорение развития новых бизнес-моделей, научных и социальных сетей;
- обеспечение надежности и безопасности цифровой инфраструктуры;
- меры по заблаговременной оценке рисков и их устранению;
- повышение кадрового потенциала в направлении цифровой технологии;

-ускорение производства цифровых технологий.

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*Мухаммадиева М.
студент 3 курса
Узбекский государственный университет
физической культуры и спорта*

ТЕНДЕНЦИИ РАЗВИТИЯ СПОРТА И ФИЗИЧЕСКОЙ КУЛЬТУРЫ В УЗБЕКИСТАНЕ

Аннотация. В данной статье рассматриваются развитие спорта и физической культуры в Республике, где ведется последовательная работа по улучшению материально-технической базы, а также развитие национальных видов спорта, необходимой для формирования будущих чемпионов.

Ключевые слова: спорт, физическая культура, навыки, федерация, оздоровления, соревнования, молодежь.

*Muhammadiyeva M.
3rd year student
Uzbek State University physical education and sports*

TRENDS IN THE DEVELOPMENT OF SPORTS AND PHYSICAL EDUCATION IN UZBEKISTAN

Abstract. this article examines the development of sports and physical culture in the Republic, where consistent work is underway to improve the material and technical base, as well as the development of national sports necessary for the formation of future champions.

Keywords: sport, physical culture, skills, federation, health improvement, competitions, youth.

В Узбекистане большое внимание уделяется развитию спорта и физической культуры. За годы независимости в стране создана эффективная система подготовки профессиональных спортсменов, тренеров и судей. Реализация этих целей всемерно способствует широкой пропаганде здорового образа жизни, воспитанию всесторонне развитой молодежи, дальнейшему развитию физической культуры и спорта в республике.

Важной правовой основой проводимых в данном направлении реформ служат Закон Республики Узбекистан «О физической культуре и спорте» и другие нормативно-правовые акты, направленные на привлечение граждан, особенно молодежи, женщин и детей, к занятиям физической культурой и спортом.

Опыт многих стран показывает, что государственная забота о судьбах национального спорта, физической культуры непременно оборачивается многократной пользой. Ведь поддержка этих статей социальной сферы первым делом создает все необходимые предпосылки для морально-физического оздоровления детско-юношеской и молодежной среды общества.

Сегодня Узбекистан является в полном смысле этого слова спортивной страной. Среди молодежи широко утверждается здоровый образ жизни, обеспечивается массовость спорта. Узбекские спортсмены, достигая высоких побед на престижных международных соревнованиях, демонстрируют всему миру высокий спортивный потенциал нашей страны. Результаты, достигнутые спортсменами на международных соревнованиях, представили Узбекистан спортивной общественности мира как страну, где спорт развивается ускоренными темпами [1].

В Узбекистане уделяется серьезное внимание развитию физической культуры и спорта, и эти проблемы возведены в ранг государственной политики, что позитивно воздействует на рост социально-воспитательной начимости всех направлений спорта, но вместе с тем существуют отдельные недочеты, которые актуализируют необходимость исторического анализа спортивной жизни страны.

Кабинет Министров Республики за годы независимости принял более десяти постановлений, направленных на дальнейшее развитие спортивного движения путем создания новых обществ, строительства спортивных сооружений, выработки условий для перевода на профессиональную основу различных групп спортсменов.

Главную работу по развитию спорта в республике ведет Министерство Культуры и Спорта Республики Узбекистан. Наравне с ним мероприятия по дальнейшему развитию олимпийского движения и участию в нем спортсменов республики обеспечивает Национальный Олимпийский Комитет, с 1993 года ставший членом Международного Олимпийского Движения.

В настоящее время во многих видах спорта национальные федерации Узбекистана являются членами международных федераций, заручившись правом участия на различных международных соревнованиях.

Подготовку специалистов по физической культуре и спорту осуществляет Узбекский Государственный институт физической культуры. В нем ежегодно обучается около 2 тысяч студентов. Высшее учебное заведение готовит преподавателей физического воспитания и тренеров-преподавателей по спорту.

За последние годы в республике ускоренными темпами развиваются отдельные виды спорта, материально-техническая база которых модернизируется с учетом принятых в мире требований.

Узбекистан периодически становится местом проведения таких престижных соревнований и турниров, как Чемпионат Азии по боксу, Чемпионат Азии и Океании по таэквондо, международный турнир категории “А” по вольной борьбе, дзюдо и других видов спорта.

Через каждые два года в столице страны проводятся международные соревнования по национальной борьбе “кураш” памяти Амира Темура и Хакима ат-Термези. В 1999 году столица стала местом проведения первого чемпионата мира по этому виду национальной борьбы с участием атлетов из 50 стран. Ныне действует Международная Ассоциация кураша (МАК), которая ведет целенаправленную работу в интересах включения данного вида борьбы в программу Олимпийских игр.

Создание в соответствии с Указом Президента Республики Узбекистан в 2002 г. Фонда развития детского спорта послужило важным шагом на пути развития детского спорта. С 2004 г. Фонд включен в структуру Министерства народного образования Республики Узбекистан.

Фонд выступает в качестве эффективного механизма реализации целей и задач в области детского спорта. Основные задачи фонда - содействие осуществлению государственной политики в области развития физического воспитания и спорта среди детей, пробуждение интереса к спорту у подрастающего поколения, защита молодежи от различных вредных влияний, воспитание ее в духе патриотизма.

В республике, в соответствии с Национальной программой по подготовке кадров, зародилась еще одна добрая традиция — проведение многоэтапных спортивных соревнований. Цель — организовать систему спортивных соревнований, направленных на повышение интереса молодежи к спорту, укрепление принципа здорового образа жизни, отбору одаренных детей:

- «Умид нихоллари» (Ростки надежды) — для учащихся средних школ;
- «Баркамол авлод» (Совершенное поколение) — для учащихся колледжей и лицеев;
- «Универсиада» — для студентов вузов [2].

В республике серьезное внимание уделяется развитию инвалидного спорта. Расширение его базы стало предметом направленных действий не только для соответствующих ведомств и общественных структур, но и Министерства социального обеспечения РУ, а также Республиканского Общества инвалидов, Регионального представительства Международного Красного Креста.

Граждане Республики Узбекистан независимо от пола, расы, национальности, языка, религии, социального происхождения, убеждений, личного и общественного положения имеют право на занятие физической культурой и спортом, создание общественных физкультурно-спортивных объединений, участие в управлении физкультурно-спортивным движением.

Иностранные граждане и лица без гражданства имеют в области физической культуры и спорта равные права с гражданами Республики Узбекистан.

Таким образом, благодаря осуществляемым в стране масштабным преобразованиям, занятие спортом стало одной из престижных сфер деятельности, особенно среди молодежи. А имена талантливых представителей Узбекистана, удостоившихся престижных международных наград, вписаны в летопись отечественного и мирового спорта.

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*Назаров М.И.
Ўзбекистон Миллий университети иқтисодий ва ижтимоий
география кафедраси доценти
Эгамбердиева М.М.
Ўзбекистон Миллий университети иқтисодий ва ижтимоий
география кафедраси доценти*

ХИЗМАТ КЎРСАТИШ СОҲАЛАРИ ГЕОГРАФИЯСИДА АЙРИМ ТЕРМИН ВА ТУШУНЧАЛАРДАН ФОЙДАЛАНИШГА БЎЛГАН ЁНДОШУВЛАР ҲАҚИДА

Аннотация. Мазкур ишда хизмат кўрсатиш соҳалари географиясида кенг қўлланиладиган айрим термин ва тушунчаларнинг мазмуни кўриб чиқилган ва улардан фойдаланишнинг ижтимоий-географик ёндошувлари асосланган.

Калит сўзлар: иқтисодий ва ижтимоий география, хизмат кўрсатиш соҳалари географияси, хизматлар соҳаси, ижтимоий инфратузилма, термин, тушунча, ижтимоий соҳалар, социал иқтисодиёт, сервис географияси.

*Nazarov M.I.
associate professor
Department of Economic and Social Geography
National University of Uzbekistan
Egamberdieva M.M.
associate professor
Department of Economic and Social Geography
National University of Uzbekistan*

APPROACHES TO THE USE OF SOME TERMS AND CONCEPTS IN THE GEOGRAPHY OF THE SERVICE FIELD

Annotation. The work examines the terms and concepts widely used in the geography of the service sector, their content, and also substantiates socio-geographical approaches to their application.

Key words: economic and social geography, geography of the service sector, service sector, social infrastructure, term, concepts, social sphere, social economy, geography of service.

КИРИШ. Ҳозирги даврда замонавий илмий ва ўқув адабиётларда мутахассислар томонидан кенг илмий истеъмолда бўлган ва бевосита

иқтисодиётнинг ижтимоий жабҳаси билан боғлиқ, ҳамда мазмун-моҳиятига кўра асосан хизматлар кўрсатиш билан узвий боғланган кўплаб тушунчалар мавжудки, улардан фойдаланиш баробарида кўпчилик ҳолатларда муайян қийинчиликлар юзага келиши табиий. Шу ўринда таъкидлаб ўтиш ўринлики, иқтисодий ва ижтимоий географиянинг бирор бир илмий йўналишида бунчалик кўп тушунчалар хилма-хиллигини учратиш қийин.

Ўрганишларнинг кўрсатишича, хўжаликнинг ижтимоий бўғини, яъни хизматлар соҳаси билан боғлиқ юқоридаги тушунчалар турли соҳа вакиллари томонидан соҳанинг хусусиятларидан келиб чиқиб ҳам турлича номланади ва талқин қилинади. Бу энг аввало, аҳолининг ижтимоий ривожланиши билан чамбарчас боғланган турли туман соҳалар ва улар фаолияти натижаларининг табиати, характери, ўзини намоён қилиш шакли, жойи ва мазмун-моҳияти билан уйғунлашиб кетади.

Юқоридагилардан келиб чиқиб, мазкур тадқиқотнинг **асосий мақсади** – таъкидлаб ўтилган тушунчаларни тадқиқ ва таҳлил қилиш асосида, уларнинг ўзаро муштараклиги, тафовутлари ҳамда ҳудудий қирраларини очиб беришдан иборат.

Бу борада, энг аввало қуйидаги **вазифаларни** ҳал этиш талаб қилинади:

- узоқ ва яқин хориж ҳамда мамлакатимиз олимлари томонидан ижтимоий соҳаларни тадқиқ этилишини комплекс таҳлил қилиш;
- турли соҳа вакиллари томонидан ижтимоий соҳалар билан боғлиқ тушунчаларнинг қўлланилиши хусусиятларини очиб бериш;
- тушунчаларнинг ҳудудий қирраларини аниқлаш ва х.к.

АСОСИЙ ҚИСМ. Аввало, шуни айтиш лозимки, *хизмат* – бу, аҳолининг (жамиятнинг) моддий-маънавий эҳтиёжларини қондиришга қаратилган инсон хўжалик фаолиятининг натижаси бўлиб бўлиб ҳисобланади. Хизматларнинг ривожланиши билан аҳолининг турмуш шароитлари яхшиланади, турмуш даражаси юксалади, алал оқибатда ҳудудларнинг ўзлаштирилиш даражаси ҳам ортиб боради, иқтисодиёт ҳамда аҳолининг турмуш даражаси барқарорлашади.

Ижтимоий соҳаларни тадқиқ этишда, аввало, соҳа мутахассислари, иқтисодчилар, социологлар алоҳида ўрин тутади. Ижтимоий соҳаларни шаклланиши ва ривожланишининг ҳудудий қирраларини ўрганишда эса географлар, хусусан иқтисодий географларнинг роли катта.

АДАБИЁТЛАР ТАҲЛИЛИ ВА УСУЛЛАР. Ижтимоий соҳаларни ривожланишининг назарий методологик масалалари кўплаб узоқ хориж олимлари томонидан ўрганилган. Бу борада, айниқса В.Кристаллер, А.Лёшларнинг ишларини алоҳида кўрсатиб ўтиш жоиз. Жумладан, штандорт назарияси асосчиларидан бири бўлган немис олимлари В.Кристаллер, А.Лёшлар томонидан ўтган асрнинг 20-30 йилларида ишлаб чиқилган ҳамда илмий жамоатчиликка “Марказий жойлар” номи билан машҳур бўлган концепция [9] ҳам хизматлар соҳасини ташкил қилишга

бағишланган илк методологик ишлардан биридир. Аслида, аввал бошда, моҳиятан аҳоли жойлашуви тизимлари билан боғлиқ бўлган мазкур концепция, унга хизматларни уйғунлаштирилиши билан, хизмат кўрсатишнинг иерархик – поғонасимон модели сифатида танилди.

Хизматларнинг терминологик асосларини ўрганишга хорижлик З.И. Беликина, Д. Белл, Т.Д. Бурменко, Ф. Котлер, К. Лавлок, В.Д. Маркова, Б.А. Райзберг ва бошқалар каби иқтисодчи олимларнинг тадқиқотлари бағишланган [14, с.1].

Ижтимоий соҳалар, хусусан хизматларни ўрганишнинг методологик масалаларига бағишланган тадқиқотлар орасида собиқ Иттифоқ даври олимлари томонидан бажарилган ишлар ҳам муҳим ўринни эгаллайди. Бу борада, В.М. Рутгайзер, Т.И. Корягина, Т.И. Арбузова ва бошқа олимларнинг тадқиқотларини айтиш жоиз. Ижтимоий соҳалар ва уларни (хусусан хизмат кўрсатиш, сервис, ижтимоий инфратузилмани) ривожланишининг ҳудудий жиҳатларига бағишланган тадқиқотлар орасида С.А.Ковалёв, В.В.Покшишевский, Ю.Г.Саушкин, А.И.Алексеев, Т.В.Райтвийр, С.Я.Ныммик, С.Вайтекунас, М.А.Абрамов, А.А.Ткаченко, Л.А.Бурян, Л.А.Меркушева, П.Н.Чепкасов, С.Б.Лавров, А.А.Анохин, Н.Т.Агафонов каби олимларнинг илмий ишланмалари алоҳида ажралиб туради. Бу даврда, турли соҳа вакиллари орасида, ижтимоий соҳаларни ривожланишининг ҳудудий жиҳатларини тадқиқ қилишда, айниқса собиқ Иттифоқнинг етакчи илмий марказлари олимлари томонидан салмоқли тадқиқотлар амалга оширилган.

Ўзбекистонда ижтимоий соҳаларни тадқиқ қилишга бағишланган ишлар, аввало соҳа иқтисодчи олимлари томонидан бажарилган. Бу борада, Б.П. Назаров, И.Г. Вольфсон, Н.Қ. Оллоёров, Т.Т. Жўраев, К.С. Саидов ва бошқалар алоҳида ўрин тутди. Улар томонидан амалга оширилган илмий ишланмалар бевосита ижтимоий инфратузилманинг моҳият мазмуни ва Ўзбекистон шароитида ривожланиши масалаларига бағишланган.

Ижтимоий соҳаларни ривожланишининг бевосита географик жиҳатлари эса А.С. Солиев, О.Б. Ота-Мирзаев, А.А. Қаюмов, М.И. Назаров, Н.Қ. Комилова, М. Хамроев, М. Отажонов ва бошқа олимлар томонидан амалга оширилган.

МУҲОКАМА ВА НАТИЖАЛАР. Мавжуд адабиётларда хизматлар ўзининг мураккаб ички тузилиши ва хусусиятидан келиб чиқиб, нафақат юқоридаги каби турлича тушунчалар тарзида ўзини намоён қилиш билан бирга, мутахассислар томонидан уларни тадқиқ қилувчи илмий йўналишларни ҳам турлича номланиши илмий истеъмолда кенг тарқалган. Қуйида мутахассислар томонидан хизматларнинг турлича номланиши ўз аксини топган:

- социал иқтисодиёт;
- хизматлар соҳаси;
- ижтимоий инфратузилма;

- хизматлар географияси;
- хизмат кўрсатиш соҳалари географияси;
- ижтимоий соҳалар географияси;
- ноишлаб чиқариш соҳалари географияси;
- сервис географияси.

Агарда, буларнинг аввалги иккитаси бевосита иқтисодиётнинг реал сектори билан боғлиқ бўлса, қолганлари географияга алоқадордир. Бинобарин, социал (ижтимоий) иқтисодиёт (социальная экономика), хизматлар соҳаси (сфера услуг) тушунчаларининг мазмуни, уларни миллий иқтисодиётнинг таркибий тузилмаси эканлиги билан боғлиқ бўлса, қолган тушунчалар эса хизматларни ривожланишининг ҳудудий аспектиларини ўзида мужассам қилади.

Юқоридаги, хизматлар билан боғлиқ тушунчалар турли туман номланишига қарамай, ўрганилаётган воқеа ҳодиса – бевосита хизмат кўрсатиш жараёнининг мазмуни (ижтимоий, яъни инсон) билан чамбарчас боғлиқлиги сабабли, аксарият ҳолларда бир-бирини тўлдирган ҳолда, кескин фарқларга эга эмас. Агарда соҳа мутахассислари, иқтисодчилар томонидан “хизматлар соҳаси” тушунчаси кўпроқ қўлланилса, соф иқтисодий географик тадқиқотларда, аввало соҳа ва унинг ҳудудий жиҳатини аниқлаш ҳолда, “хизмат кўрсатиш соҳалари географияси” деб номлаш кенг тарқалган.

1-жадвал

Хизматларнинг мазмуни ва таркибига бўлган ёндошувлар

Ф.И.О.	Хизматларнинг номланиши	Хизматларнинг мазмуни	Хизматларнинг таркиби
Рутгайзер В.М., Корягина Т.И., Арбузова Т.И. [19, 6.5]	Хизматларнинг номланиши	Хизматлар соҳаси – бу, ижтимоий ишлаб чиқариш тизимида аҳолига хизматлар ва маънавий бойликни ишлаб чиқариш ва реализация қилиш вазифаси юклатилган тармоқлар, тармоқчалар ва фаолият турлари йиғиндиси.	Уй-жой коммунал хўжалик, аҳолига маиший хизмат кўрсатиш, халқ таълими, соғлиқни сақлаш, жисмоний тарбия ва ижтимоий таъминот, маданият ва санъат, йўловчи транспорти, аҳолига алоқа хизмати кўрсатиш, чакана савдо, умумий овқатланиш.

Абрамов М.А. [1, б.14]	Сервис географияси (Хизматлар соҳаси)	Хизматлар соҳаси деб, аҳолининг эҳтиёжларини бевосита қондириш билан боғланган, бажарадиган вазифаларининг умумийлиги бўйича бирлашган, ишлаб чиқариш ва ноишлаб чиқариш соҳалари тармоқларининг уйғунлигидан иборат.	Савдо, маиший хизматлар, транспорт ва алоқа хизматлари, уй-жой коммунал хўжалик, соғлиқни сақлаш.
Горкин А.П. (Ачкасова Т.А.) [18, б.65; стр.107]	Учламчи соҳалар географияси (Хизматлар соҳалари географияси)	Турли мамлакат ва минтақаларда, турлича табиий, ижтимоий-иқтисодий ва демографик шароитларда ҳамда турлича аҳоли жойлашуви шаклларида, ижтимоий инфратузилманинг компоненти сифатида иқтисодиётнинг учламчи сектори (ноишлабчиқариш соҳалари, хизматлар соҳаси)нинг ҳудудий тузилиши ва ривожланиши қонуниятларини ўрганувчи ижтимоий-иқтисодий географиянинг тармоғи. Синоним сифатида хизмат соҳалари географияси терминини ишлатиш мумкин.	Ахборот хизматлари, молия, транспорт, алоқа, савдо, маиший хизматлар, таълим, соғлиқни сақлаш, илмий-тадқиқот ва тажриба конструкторлик ишлар, спорт, туризм, курулли кучлар, маъмурий хизматлар ва б.
	Инфратузилма	Моддий ишлаб чиқаришнинг фаолият юритиши ва ривожланиши ҳамда аҳолининг кундалик ҳаётини таъминлаш учун зарур бўлган, муайян ҳудудда жойлашган иншоотлар, бинолар, тизим ва хизматларнинг йиғиндисидир.	Электр ўтказиш линиялари, автомобил ва темир йўллар, аэропортлар, сув таъминоти тизимлари ва бошқалар.

Асанов Г. [6, б.214-215]	Хизматлар географияси	Иқтисодий географиянинг бир тармоғи бўлиб, аҳолига моддий ва ижтимоий-маиший хизмат кўрсатиш хилма-хил турларининг жойлашиши ва территориал ташкил қилинишини ўрганади.	Соғлиқни сақлаш, таълим, томоша ва маданий-маориф, алоқа, юридик, маъмурий фаолият, хавфсизлик хизмати ва бошқаларни ўз ичига олади. Кенгроқ маънода эса хизматлар географияси ўз ичига аҳолининг моддий эҳтиёжлари билан боғлиқ чакана савдо, умумий овқатланиш, шаҳар транспорти, коммунал хўжалик, баъзан курорт хўжалиги ва туризмни ҳам қамраб олади.
	Хизматлар соҳаси	Хизматлар соҳаси халқ хўжалигининг шундай тармоғики, у хилма-хил социал-иқтисодий функцияларни бажаради.	Кенг маънода хизмат соҳасига савдо, умумий овқатланиш корхоналари, пассажир транспорти, уй-жой коммунал хўжалик, маиший хизмат корхоналари ва бошқалар кирди
Гаррет Негл, Крис Спенсер [11, б.140]	Хизматлар соҳаси	Хизматлар деб, товар ишлаб чиқаришдан бошқа ҳар қандай иқтисодий фаолиятга айтилади.	Суғурта, банк иши, транспорт, туризм, соғлиқни сақлаш, ахлат тозалаш, кўнгилочар жойлар, таълим, савдо.

Изоҳ: Жадвал, муаллиф томонидан тузилган.

Хизмат кўрсатиш соҳаларини таниқли тадқиқотчиларидан бири бўлган М.А.Абрамовнинг таъкидлашича, “сервис” ҳамда “хизмат кўрсатиш соҳалари” тушунчаларини ўзаро синоним деб ҳисоблаш мумкин [1, стр.14].

Қуйидаги жадвалларда соҳанинг етакчи олимлари, мутахассислари томонидан хизматлар соҳасининг мазмуни ва таркибига бўлган ёндошувлар ўз аксини топган.

Ижтимоий ҳаётда юқоридаги тушунчалар орасида “инфратузилма” тушунчаси ҳам кенг қўлланилади. Умуман олганда, инфратузилма – бу, моддий ва номоддий (аҳоли турмуш шароитлари билан бевосита боғланган) соҳаларнинг нормал фаолияти узлуксизлигини таъминлашга асос бўлиб хизмат қилувчи турли туман нарса ва жиҳозлар, бино ва иншоотлар, тузилмалар, ҳамда хизматлар жараёни йиғиндисидан иборат.

Аксарият илмий жамоатчилик томонидан инфратузилма одатда иккига – *ишлаб чиқариш* ҳамда *ижтимоий* инфратузилмага ажратилади. Бундай ажратиш кўпчилик ҳолатларда шартли аҳамиятга эга бўлсада, улар ўртасидаги муайян тафовутни ҳам инкор қилиб бўлмайди.

Шуни алоҳида таъкидлаш жоизки, айрим адабиётларда муаллифлар томонидан инфратузилмани - “инфратузилма тармоқлари” деб, нотўғри номлаш ёки талқин қилиш ҳолатлари ҳам учрайди (Асанов Г., 1990, 86 б.).

Агарда, инфратузилмани мазмун моҳияти, бажарадиган вазифаларидан келиб чиқиб, таҳлил қилсак, у ҳолда унинг мазмуни, ҳоқ моддий ишлаб чиқаришга хизмат қилишидан қатъий назар, ҳоқ аҳолининг

кундалик ҳаёт шароитларини яхшилашга хизмат қилсин, энг аввало муайян шарт-шароитларни ўз ичига қамраб олганлиги билан гавдаланади.

Демак, бундан шундай хулоса чиқадики, инфратулма – бу, энг аввало шарт-шароитлар йиғиндиси. Инфратулманинг ривожланганлик даражаси билан ҳудудларнинг ижтимоий-иқтисодий ривожланиши даражаси ўртасида муайян алоқадорликлар мавжуд. Бинобарин, ҳудудларнинг транспорт коммуникация, ирригация мелиорация, энергетика, ва бошқа *ишлаб чиқариш инфратулма* салоҳиятининг юқорилиги, ўз навбатида уларнинг ишлаб чиқариш салоҳиятини юксалишига пойдевор яратса, аҳолисининг турмуш даражасини юксалиши эса ўз навбатида, кенгроқ маънода ижтимоий инфратулма деб аталувчи турли туман ижтимоий (соғлиқни сақлаш, таълим, маданий-маиший, уй-жой коммунал, йўловчи транспорти, спорт ва туризм ва б.) хизматларнинг ривожланганлик даражаси билан боғлангандир. Г. Асанов кенгроқ маънода эса хизматлар географияси ўз ичига аҳолининг моддий эҳтиёжлари билан боғлиқ чакана савдо, умумий овқатланиш, шаҳар транспорти, коммунал хўжалик, баъзан курорт хўжалиги ва туризмни ҳам қамраб олади, деб таъкидлаган [6, б.214-215].

ХУЛОСА қилиб айтганда, хизматлар соҳаси нафақат ўзига хос хусусиятлари, мураккаб ички тузилмаси, аҳамияти, хизматларнинг характери, шакл шамоили, мазмуни билан балки, термин ва тушунчаларининг ҳам турли туманлиги билан алоҳида ажралиб туради. Мазкур соҳа ва унинг ички таркибий тузилмаларига, фаолият ҳамда ҳудудий таркибига тизимлилик жуда хос. Хизматлар кўплаб соҳа тадқиқотлари учун объект вазифасини ўтайди. Булар ўз навбатида, термин ва тушунчаларнинг турличалигига олиб келган. Аммо, шуларга қарамай хизматларнинг мазмуни бевосита аҳоли, унинг эҳтиёжлари ва унга кўрсатилаётган хизмат турлари билан чамбарчас боғланган. Шулардан келиб чиқиб, улар билан боғлиқ турли термин ва тушунчаларнинг илмий истеъмолда бўлиши табиий ҳолдир.

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Назаров М.И.

доцент

кафедра экономической и социальной географии

НУУз

Омонтурдиев А.М.

докторант

НУУз

ТЕРРИТОРИАЛЬНАЯ ОРГАНИЗАЦИЯ ТРАНСПОРТНОГО ОБСЛУЖИВАНИЯ НАСЕЛЕНИЯ СУРХАНДАРЬИНСКОЙ ОБЛАСТИ

Аннотация. В статье изучены географические вопросы оказания транспортных услуг населению Сурхандарьинской области. При этом, прежде всего, проанализировано состав транспортных сетей области, территориальные транспортные системы, территориальная организация и развитие транспортной инфраструктуры, в том числе вопросы общественного транспорта населению. Были изучены территориальные особенности услуг общественного транспорта по сельским районам и проведен опрос населения. В этой связи был использован зарубежный опыт.

Ключевые слова: транспорт, транспортные сети, транспортное обслуживание, транспортная инфраструктура, общественный транспорт, сельские округа, опрос, населенные пункты.

Nazarov M.I.

associate professor

Department of Economic and Social Geography

NUUZ

Omonturdiev A.M.

PhD student

NUUZ

TERRITORIAL ORGANIZATION OF TRANSPORT SERVICES FOR THE POPULATION OF SURKHANDARYA REGION

Abstract. The article examines the geographical issues of providing transport services to the population of the Surkhandarya region. At the same time, first of all, the composition of the region's transport networks, territorial transport systems, territorial organization and development of transport infrastructure, including issues of public transport for the population, were analyzed. The territorial features of public transport services in rural areas were

studied and a population survey was conducted. In this regard, foreign experience was used.

Key words: Transport, transport networks, transport services, transport infrastructure, public transport, rural districts, survey, settlements.

ВВЕДЕНИЕ. В любом исследовании географии транспорта основное внимание уделяется двум аспектам транспорта. Это, во-первых, транспорт как элемент производственной инфраструктуры, во-вторых, транспорт как социальная инфраструктура. В предыдущих главах внимание было уделено естественно-географическим, организационно-правовым, экономическим (производственным) аспектам географического исследования транспорта, а ниже будет сосредоточено внимание на проблемах его рациональной территориальной организации и развития как элемента социальной системы. инфраструктуры, с точки зрения оказания услуг населению. В этом отношении он (транспорт) служит важным фактором улучшения условий жизни населения и повышения уровня жизни.

В настоящее время сфера услуг занимает ведущее положение в мировой экономике и экономике отдельных стран, при этом транспорт занимает особое место. В частности, доля сферы услуг в ВВП Узбекистана составила 61,0%, а доля транспортных услуг – 15% (2021 г.). На Сурхандарьинскую область приходится 4,5% от общего количества пассажиров, перевезенных по республике.

Прежде всего следует отметить, что уровень развития транспорта, уровень формирования и развития его региональных систем, уровень экономического и социального развития региона, т.е. производственный потенциал, плотность населения систем расселения - Плотность сети городов и сел, а также региональная мобильность населения тесно связаны.

Его роль бесподобна в использовании таких секторов, как образование, медицина, торговля, отдых, туризм и региональное распределение трудовых ресурсов.

Транспортная инфраструктура «притягивает» население. Города и поселки в основном сосредоточены вдоль пересечения транспортных путей. Таким образом, транспорт служит росту и развитию поселений. Например, в западной и восточной частях региона транспортная сеть разрежена, напротив, в центральной и южной частях, где плотно расположены транспортные сети и промышленные предприятия, транспортная сеть густая.

В целом в сфере услуг региона основные позиции в сфере услуг занимают торговля, банковское дело, финансы, транспорт, образование, медицина и услуги. Доля транспортных услуг с каждым годом увеличивается.

ЛИТЕРАТУРНЫЙ АНАЛИЗ И МЕТОДЫ. Вопросы транспортно-экономического, транспортно-инфраструктурного потенциала регионов,

формирования и развития их территориальных систем исследуются учеными различных специальностей. В связи с этим из зарубежных учёных: Жан-Поль Родриг (2006, 2020) [1], Джо Гренгс [2], из учёных СНГ: И.В. Никольский (1978) [9], В.Н. Стоит отметить работы Бугроменко (1987) [3], С.А. Тархова (2002) [8]. Из них исследования Жана-Поля Родрига были сосредоточены на математическо-статистических методах исследования транспорта, а В.Н. Это можно увидеть и в работах Бугроменко [3].

Проблемы эффективного управления транспортной системой Центральной Азии А. Зохидов (2018) [12], Районирование территории Республики Узбекистан по условиям дорожного движения А. Козиев (2010) [7] изучал, а А.А. Исаев изучал развитие региональных транспортных систем Ферганской области (2009 г.) [6], а З. Усманов изучал географические аспекты развития и совершенствования транспортной системы Узбекистана в условиях независимости (2020 г.).

В исследовании банковские, финансовые, медицинские, образовательные центры действуют преимущественно в городах Термез, Денов, медицинские услуги и крупные торговые центры - в таких районах, как Денов, Термез, Шерабод, Ангор, Шорчи. В связи с концентрацией основных услуг в крупных городах пассажиропоток в основном имеет высокую долю именно в этих направлениях. В таких районах, как Бандихон, Олтинсой, Узун, банковское финансирование, медицинское обслуживание развиты недостаточно хорошо.

Например, основные больницы региона расположены в городе Термез (17) и Деновском районах (14). С одной стороны, работа одной больницы в Бандихонском, Узунском, Музработском районах показывает, что население, проживающее в районах, плохо обеспечено медицинскими услугами, а с другой стороны, эти жители обращаются в больницы других районов посредством транспорта. В результате спрос на транспортные услуги в крупных городах увеличивается.

Для региональной рациональной организации транспортных услуг формирование спроса на грузовые и пассажирские перевозки зависит от нескольких факторов. Они отражены в:

- социально-экономические факторы - возможности использования населением транспорта;
- территориальные факторы - промышленное, экономическое и социальное значение города и прилегающих к нему территорий, численность и плотность населения, близость к транспортной инфраструктуре;
- организационные факторы - наличие инфраструктуры, плотность маршрутной сети, виды транспорта, время и качество перевозки;
- природно-климатические факторы.

Региональные транспортные услуги делятся на группы по масштабу, виду и виду транспорта. Транспортные услуги делятся на местные

(межрайонные), региональные (межобластные) и международные. При этом воздушный транспорт имеет большое значение в пассажирских перевозках на международном уровне, а автомобильный транспорт выполняет основную функцию на региональном и местном уровне грузовых и пассажирских перевозок. Железнодорожный транспорт в основном используется для международных грузоперевозок.

Изучение международного опыта показывает, что автомобильный транспорт удобен для коротких расстояний, железнодорожный – для средних, а морской или воздушный транспорт – для дальних. При этом автомобильный транспорт активен на расстоянии до 750 км, а железнодорожный транспорт считается удобным на расстоянии 750-1500 км[1].

Объем транспортных услуг в регионе с 2010 по 2021 год увеличился в 7 раз (234,3 млрд сумов в 2010 году, 1,6 трлн сумов в 2021 году). В 2021 году автомобильным транспортом региона было перевезено около 265 млн пассажиров.

Грузовые и пассажирские перевозки на железной дороге увеличиваются с каждым годом. В 2022 году по железной дороге перевезено 2,3 млн тонн грузов и 700 тысяч пассажиров. На воздушном транспорте в 2021 году перевезено 400 тысяч пассажиров.

На региональном железнодорожном транспорте население обслуживается межрегиональными пассажирскими поездами «Термиз-Ташкент», «Андижан-Термиз», «Сариосия-Ташкент» и междугородными поездами «Термиз-Дербанд», «Термиз-Сариосия» и «Термиз-Сариосия». Термиз-Сурханабад».

Недостатками использования этого вида транспорта являются недостаточное качество и скорость перевозок на региональной железной дороге. К примеру, поскольку скорость междугородних поездов «Термиз-Сариосия», «Термиз-Дербанд» и «Термиз-Сурханабад» невысока, население в основном выбирает автомобильный транспорт. Необходимо будет полностью электрифицировать и увеличить скорость этих междугородних железнодорожных линий.

Отсутствие железнодорожного транспорта в некоторых районах области делает транспортное обслуживание в этих районах неудовлетворительным. В частности, районы Олтинсой, Кызырик, Бандихон, где нет железнодорожных путей, и эти районы отстают по количеству перевезенных пассажиров по экономическим показателям.

В районе исследования расположено 26 железнодорожных станций, причем железнодорожным транспортом на междугородних линиях пользуются в основном пассажиры жилых массивов, расположенных вблизи станций. Вдоль региональных железных дорог расположено 94 квартала.

РЕЗУЛЬТАТЫ И ОБСУЖДЕНИЕ. Автомобильный транспорт имеет абсолютное преимущество в сфере пассажирских перевозок в регионе, более 95 процентов перевезенных пассажиров приходится на автомобильный транспорт. Действительно, когда среди жителей региона проводился социально-демографический опрос о состоянии транспорта в регионе, 88% участников считают, что в транспортной системе региона относительно хорошо развит автомобильный транспорт, а 11% из них считают, что железнодорожный транспорт развит.

Аналогичным образом, 29,7% участников сказали, что оно хорошее, 46,5% - среднее, 21,5% - плохое, а 8% заявили, что затруднились ответить на вопрос "Как вы оцениваете общее состояние общественного транспорта в городе?" район, в котором ты живешь?»

Грузовые и пассажирские перевозки невозможно представить без автомобильного транспорта. В последние годы доля частного транспорта в перевозках грузов и пассажиров увеличивается. В области действуют 254 предприятия пассажирского транспорта, количество транспортных средств в них составляет 5567.

Пассажирские перевозки индивидуальными автовладельцами растут с каждым годом по сравнению с другими отраслями. В составе транспортных средств предприятий пассажирского транспорта области 4-местные легковые автомобили составляют 3706, автомобили Damas - 1532, остальное - автобусы (319), микроавтобусы (14).

При изучении потока пассажиров выяснилось, что они двигались в направлении городов, где расположены основные транспортные узлы, таких как Термез, Денов, Ангор, Шерабод, Кумкурган. Всего в области действуют 160 маршрутов, 127 внутрирайонных и 33 межрайонных.

В Термезском, Деновском, Шерабодском, Кумкурганском районах имеются крупные автостанции для автобусных и таксомоторных маршрутов. Автовокзалы в остальных районах не очень большие, а в некоторых районах автовокзалы вообще отсутствуют. По состоянию на 2022 год в регионе действуют 16 автозаправочных станций и автовокзалов.

В области налажены транспортные маршруты между районами, и они есть; Денов-Термиз, Шерабод-Термиз, Денов-Шорчи, Денов-Узун, Денов-Олтинсой, Термиз-Ангор, Термиз-Музработ, Термиз-Кизирик. При этом ежедневных рейсов по направлениям Термез-Бойсун, Денов-Музработ мало.

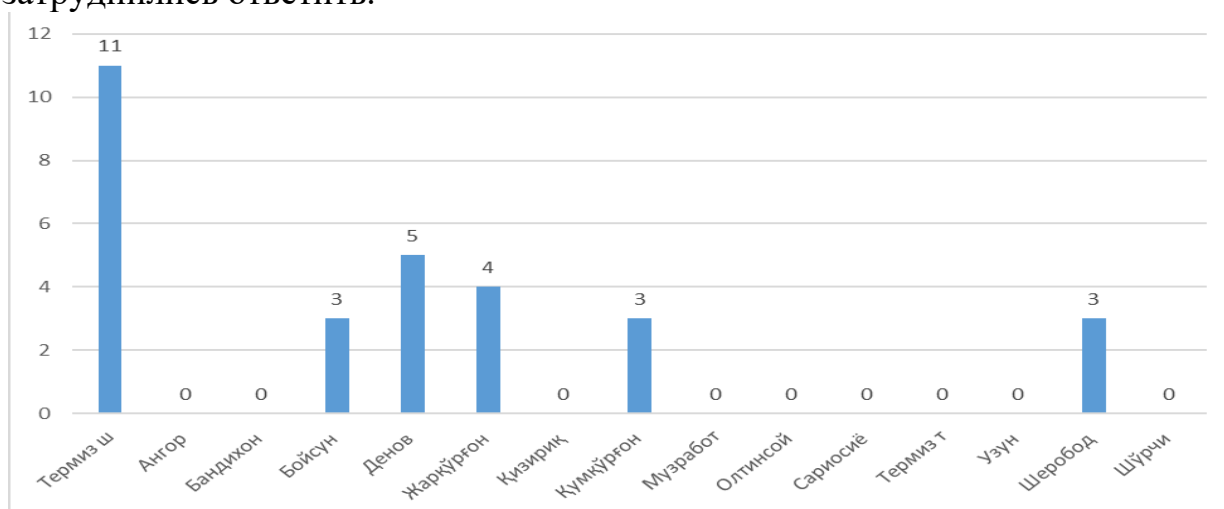
Также не запущен межрайонный общественный транспорт (автобусы) на маршрутах, соединяющих Термиз-Сариосие, Термиз-Олтинсой, Термиз-Узун, Термиз-Бандихон с областным центром. И это, безусловно, доставит населению неудобства транспортного обслуживания.

В настоящее время в городе Термез сравнительно хорошо развит общественный транспорт (автобусные маршруты). Он имеет 11 автобусных

маршрутов и обеспечивает 117 автобусных рейсов. В Деновском районе 5 автобусных маршрутов, в Жаркурганском районе 4 автобусных маршрута.

Автобусные маршруты отсутствуют в Ангорском, Бандихонском, Кызырикском, Музработском, Олтинсойском, Сариосийском, Термизском, Узунском, Шорчинском районах. В эти районы их заменит маршрутное такси. Однако развитие регионов и рост численности населения делают актуальным создание автобусных линий, в том числе современного общественного транспорта, в вышеуказанных районах.

В социально-демографическом опроснике о состоянии транспорта региона задан вопрос «Какие направления развиты в сфере транспортного обслуживания населения в районе проживания?» 63,5% службы такси, 31% местное такси, 10% общественный транспорт (автобус) 3,% ответили, что затруднились ответить.



Фигура 1. Количество автобусных маршрутов в сельских округах, обслуживающих общественный транспорт (2022 г.)

Также на вопрос «Каким видом транспорта вы чаще всего пользуетесь в повседневной жизни?» 48,4% участников ответили, что пользуются такси, 27,7% — такси, 15% — личным автомобилем, 14,8% — автобусом, 1,2. % услуги железнодорожного транспорта 3,1% из них ответили, что затруднились ответить. Ответ большинства участников о том, что они пользуются услугами такси, показывает, что общественный транспорт необходимо развивать.

Население вышеуказанных районов растет с каждым годом, например, в Сариосийском районе проживает 217 715 человек, в Узунском - 179 515 человек, в Алтынсойском - 184 019 человек. Это население пользуется услугами, которых нет в районе, в областном центре. Пассажир, желающий поехать в центр получения медицинских услуг по месту жительства, сменит транспорт 2 или 3 раза. То есть тот факт, что между двумя точками нет прямого транспортного сообщения, означает, что территория слабо развита.

В ходе анализа регионального транспортного обслуживания мы узнали, что во многих районах общественный транспорт доступен только в районах, близких к районному центру. Это свидетельствует о том, что большинство жителей пользуются личным транспортом (такси), отсутствии общественного транспорта в районе, а также о том, что организационные вопросы в отрасли не решены.

Однако поскольку общественный транспорт не обеспечивает транспортными услугами всех жителей, целью исследования было изучение состояния частного транспортного обслуживания населения и населенных пунктов. Для этого использовались Google Earth, Yandex Map, Google Map и другие приложения для изучения расположения населенных пунктов относительно экономических и социальных объектов в центре района, таких как торговля, медицина, образование, банковское дело и финансовые услуги. Изучено, сколько времени занимает дорога от поселка до центра района на личном транспорте, удобен или неудобен такой срок для населения.

Кроме того, транспортное состояние регионов определялось по формуле коэффициента Гольца, оценивающего обеспеченность транспортной сетью населенных пунктов. Учитывая тот факт, что автомобильно-транспортная система охватывает все населенные пункты региона, на автомобильном транспорте были изучены оба подхода. Изучение населенных пунктов другими видами транспорта, например железнодорожным, может привести к очень низкой оценке транспортного удобства регионов. Потому что железнодорожные пути не покрывали всю территорию, как автомобили.

Поэтому формула коэффициента Гольца, оценивающего обеспеченность населенных пунктов транспортной сетью, выглядит следующим образом[5];

$$\Gamma = \frac{L}{\sqrt{S * \Pi}}$$

Γ - коэффициент Гольца (общая оценка обеспеченности транспортной сетью населенных пунктов региона)

L - протяженность автомобильных дорог (автомобильных или железнодорожных)

S - площадь

Π — количество населенных пунктов на территории.

Изучение состояния частного транспортного обслуживания населения и населенных пунктов области полностью изучено с помощью таких приложений, как Google Earth, Яндекс карта, Google Map, а также расстояние до населенных пунктов и центра района для населенных пунктов всех районов области.

Проанализировано 923 населенных пунктов объекта исследования. В этих 923 населенных пунктах 2 535 900 человек (93% от общей численности населения) провели время, путешествуя в центр тумуна. Город Термез не нуждался в исследовании благодаря развитому транспортному обеспечению по сравнению с другими регионами.

Вышеупомянутые жители посещают районный или областной центр по какой-либо услуге. Учитывая, что большая часть населения выезжает на какие-то работы в центр района, это изучалось на районном уровне.

Около 15% населения региона проводит от места проживания до центра района от 45 минут до 2 часов. Особенно ярко эти показатели проявляются в горных районах (табл. 1).

При изучении описанным выше подходом важна также плотность населения в населенном пункте. Например, населенные пункты Нилу, Дехайсурх, Дебодом, Таджикское село, Чанглок Сариосийского района (каждый с населением более тысячи человек) добираются до центра района более 1 часа (население 2927 человек), дорога до райцентра занимает не менее 150 минут (2 часа 30 минут).

При изучении всего населения региона существенной разницы нет. Например, 41% от общего числа населенных пунктов расположены в пределах 15 минут от районного центра с населением 51%. Однако разрез районов показывает, что они имеют очень неудобную транспортную систему даже при использовании личного транспорта (1- табл).

Таблица 1

Время, затрачиваемое на дорогу от поселка до центра района на автомобиле

№	Районы	в, (минут)													
		менее 15		16-30		31-45		46-60		61-90	Более 1,5 часов			Общий	
		К-о НП*	К-о н-е*	К-о НП	К-о н-е	К- о НП	К-о н-е	К- о НП	К-о н-е	К-о НП	К-о н-е	К- о НП	К-о н-е	К-о НП	К-о н-е
1	Алтынсайский	25	72561	24	85961	9	21038	2	4459					60	184019
2	Ангорский	18	72198	21	65188									39	137136
3	Байсунский	6	46384	13	26717	7	9122	17	25636	3	2405	7	6808	52	117072
4	Денауский	55	252480	22	114830	5	6258	5	23882					117	399450
5	Джаркурганский	36	135450	28	67367	8	24071							72	226888
6	Кизирикский	22	58633	23	51518	2	8702							48	118853
7	Кумкурганский	31	105332	20	74371	14	34597	23	29379					88	243679
8	Музрабадский	23	52601	18	62919	4	26790	3	4828					58	147138
9	Сариасийский	61	137749	24	50514	5	4611	8	6940	17	9404	3	2172	118	211390
10	Термезский	11	32297	10	21565	10	16381	3	10095					34	80338
11	Узунский	35	86216	14	35418	6	18767	6	12124	7	6931	15	18950	83	178406
12	Шерабадский	28	99296	44	63238	12	15209	11	14860	10	8805			105	201408
13	Шурчинский	24	116732	24	88090	3	6671	2	1689					53	213182
14	Бандиханский	4	37532	9	41180									43	78712
	по областям	399	1305461	334	848876	95	192217	80	133892	37	27545	25	27930	923	2535921
	н/п	Общее количество обследованных населенных пунктов												9 70	
15	Термез ш	Региональный центр													
	Не изучен	Жители небольших и переименованных населенных пунктов, которые невозможно изучить													
	Научился	Учтенное население													
	Население	Общий Население													

*- количество населённый пункт, количество население

Таблица определена автором на основе ссылок <https://yandex.uz/maps/>, <https://www.google.com/maps>.

В масштабах районов жители Ангорского, Шорчинского, Кызырикского и Джаркурганского районов тратят на дорогу до райцентра от 15 до 45 минут, а в Узунском, Сариосийском, Байсунском, Шерабадском и Кумкурганском районах – от 15 до 150 минут (Таблица 1).

Практически те же результаты, что и в приложениях Google Earth, Yandex Map, Google Map, можно увидеть при расчете по формуле коэффициента Гольца, оценивающего транспортную сеть населенных пунктов. Целью использования обоих методов является получение более надежных и точных результатов.

Таблица 2

**Оценка транспортно-экономического потенциала сельских округов
Сурхандарьинской области**

Нет	Районы	площадь км кв. S	Автомобили и автомобили длина км Л	Население номер точки П	Коэффициент обеспечения транспортными сетями населенных пунктов региона [7] $\Gamma = \frac{L}{\sqrt{S \cdot \Pi}}$
	Ангорский	390	121	39	0,9
	Байсунский	3720	338	54	0,7
	Денауский	750	291	123	0,9
	Джаркурганский	114 0	168	72	0,6
	Кумкурган	21 00	198	88	0,5
	Кизирикский	330	130	47	1
	Музрабадский	740	219	58	1
	Алтынсайский	560	194	60	1
	Сариасийский	383 0	159	120	0,2
	Узунский	233 0	175	85	0,4
	Термезский	820	203	34	1.2
	Шерабадский	2730	385	104	0,7
	Шурчинский	850	153	55	0,7
14	Бандиханский	680	77	43	0,4
	по областям	20.100	2843	982	0,6
	Термез г	0,04			

Таблица составлена автором

Сариасийский, Узунский, Кумкурганский, Бандихонский районы имеют самые низкие показатели по сравнению со среднеобластными показателями, а Термезский, Алтынсойский, Музработский, Ангорский районы имеют высокий уровень обеспеченности дорожно-транспортной сетью. Средний уровень получили такие районы, как Денавский, Шурчинский, Джаркурганский, Кызырикский, а также Байсунский и Шерабадский, имеющие длинные автомагистрали и небольшую численность населения.

При определении коэффициента Гольца он определяется отношением длины транспортных путей к площади территории, умноженной на количество населенных пунктов в округе (табл 2).

Еще одним фактором, влияющим на интенсивность пассажиропотока, является маятниковая миграция населения. Наблюдения показывают, что утром люди переезжают из своего населенного пункта в районные центры, а также в крупные города, такие как Термез, Денов, а вечером из этих городов в сторону районов. Видно, что поток пассажиров из города Термеза в Ангорский и Джаркурганский районы, из города Денов в Сарийский, Алтынсойский, Узунский районы больше.

Перевозки пассажира до определенной точки с использованием транспортных услуг занимает разное время в зависимости от многих факторов. Например, расстояние зависит от близости расстояния, скорости автомобиля, местности и других аспектов.

Мы разделили услуги пассажирских перевозок на международные, региональные и местные группы по масштабу. Международные пассажирские перевозки осуществляются региональным воздушным транспортом. В регионе имеется международный аэропорт только в городе Термез, через который в 2021 году перевезено 40 тысяч человек. Из них 26 тысяч было перевезено внутри республики, 14,2 тысяч - в страны СНГ и меньше - в страны дальнего зарубежья.

Здесь стоит отметить, что для региона с населением 2,7 млн жителей и площадью 20,1 тыс. квадратных километров 1 аэропорт не может полностью удовлетворить потребность в авиаперевозках, а требует создания дополнительного аэропорта.

Почти 60 процентов населения региона проживает в северных районах, и путешествие на 150 км и более на воздушном транспорте обременяет население чрезмерными транспортными расходами. Учитывая это, целесообразно создать отдельный аэропорт в северной части региона.

Хотя доля городского населения в регионе (36%) ниже общероссийского уровня (51%), рост городского населения и ускорение процесса урбанизации в последние годы вызвали трудности в обеспечении транспортных услуг в городах.

В частности, к ним относятся увеличение количества транспортных средств в городе Термез, относительно высокий уровень шума и дорожного движения, негативное воздействие на атмосферу города.

Сегодня общественный транспорт в городе Термез развит хорошо по сравнению с другими районами. Территория города Термез составляет 189 497 человек на квадратный километр, а уровень предоставления услуг как административного центра региона относительно высок. Здесь имеется 12 больниц областного уровня, 6 высших учебных заведений, крупные торговые центры и промышленные предприятия. В городе Термез имеется железнодорожный вокзал, 2 железнодорожных вокзала, а также аэропорт

недалеко от города. Здесь действуют основные медицинские, образовательные и финансовые учреждения региона. Благодаря этому здесь возрастает спрос на общественный транспорт.

Сегодня преимущественно в этом административном центре налажено автобусное сообщение. С точки зрения инфраструктуры городской транспорт находится в плохом состоянии, поэтому остановок для рейсовых автобусов не хватает.

ЗАКЛЮЧЕНИЕ

Несмотря на положительный рост объема транспортных услуг в регионе, его развитие в соответствии с ростом национальной экономики сдерживается следующим:

- относительно низкий уровень обеспеченности дорожной сетью и другими объектами инфраструктуры;
- качество, скорость и уровень востребованности перевозок на железнодорожном транспорте;
- в отдаленных районах города практически отсутствует инфраструктура пассажирского транспорта;
- тот факт, что транспортные услуги осуществляются преимущественно в центрах, транспортные расходы населения в горных районах высоки
- что грузоперевозки и избирательные операции не налажены.
- медленное наполнение существующего транспортного парка современными автомобилями;
- предотвращение пробок за счет создания инфраструктуры для движения легкового транспорта в зоне рынка;

Для решения этих проблем приоритетной задачей является организация новых маршрутов общественного транспорта, установление остановок, приобретение новых автобусов и микроавтобусов для общественного транспорта.

При территориальной организации транспортного обслуживания населения региона необходимо учитывать рост численности населения, потребность в хозяйственных объектах и сферах обслуживания.

Разработано расположение около тысячи населенных пунктов, что является основой рационального размещения транспортного обслуживания, изучено состояние автомобильного транспорта. В дальнейшем важной задачей является организация транспортного обслуживания на районном уровне, эффективно используя эти работы.

Кроме того, в развивающихся районах Денов, Шерабод, Жаркурган, Кумкурган, Шорчи, Сарыюсия разрабатывается карта общественного транспорта и система оплаты, что является одной из принципиальных задач в этой сфере.

В междугородних железнодорожных пассажирских перевозках низкая скорость движения поездов, старение пассажирских вагонов,

отсутствие пассажирского железнодорожного сообщения на большинстве станций или ветхость являются некоторыми из проблем железнодорожного транспорта в сфере пассажирских перевозок.

Воздушный транспорт — одна из первых отраслей пассажирского транспорта в региональной транспортной системе, которая должна быть изменена. Потому что воздушный транспорт работает только в городе Термез. Размеры региона и большая численность населения региона, удаленность аэропорта от центральных районов затрудняют использование воздушного транспорта.

Большая часть населения тратит 10-12 часов, чтобы добраться на машине до столицы Ташкента. Поэтому аэропорт в Сариосийском районе должен быть организован как второй аэропорт в регионе. За счет введения конкуренции на воздушном транспорте будут оптимизированы цены и увеличится использование воздушного транспорта населением.

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*Намозова М.У.
студент 3 курса
группа БИА-40*

Ташкентский государственный экономический университет

РОЛЬ ПОВЫШЕНИЯ ФИНАНСОВОЙ ГРАМОТНОСТИ В УЗБЕКИСТАНЕ

Аннотация. В данной статье рассматривается важность повышения финансовой грамотности в Узбекистане и ее роль в содействии экономическому развитию страны. Обозреваются проблемы низкого уровня финансовой грамотности среди населения и обсуждаются основные вызовы, стоящие перед страной в этом вопросе. Анализируются стратегии и методы, направленные на повышение уровня финансовой грамотности, включая образовательные программы и инициативы как со стороны государства, так и частного сектора. В статье также выделяется роль современных технологий в обучении финансовой грамотности. Обсуждаются перспективы и вызовы, связанные с развитием программ повышения финансовой грамотности в Узбекистане, а также роль международного сообщества в этом процессе.

Ключевые слова: финансовая грамотность, экономическое развитие, образовательные программы, технологические инновации, вызовы, финансовые навыки, инвестиции, бюджетирование, финансовые решения, финансовое благополучие, стратегии обучения, финансовые инструменты, цифровые ресурсы, финансовые риски, микрофинансирование, устойчивость, инфраструктура финансовой грамотности, управление личными финансами, страхование, пенсионное обеспечение, налоговая грамотность, финансовые цели, финансовая планирование, финансовая культура, макроэкономическая стабильность, управление долгом, инфляция, кризисные ситуации, финансовая безопасность, финансовые ресурсы, финансовый рынок, устойчивое развитие, международная экономика, монетарная политика, финансовая ответственность, банковские услуги, цифровая экономика, сберегательные программы.

*Namozova M.U.
3rd year student
group BIA-40
Tashkent State Economic University*

THE ROLE OF INCREASING FINANCIAL LITERACY IN UZBEKISTAN

Annotation. This article discusses the importance of improving financial literacy in Uzbekistan and its role in promoting the economic development of the country. The problems of low levels of financial literacy among the population are reviewed and the main challenges facing the country in this matter are discussed. Strategies and methods aimed at improving financial literacy are analyzed, including educational programs and initiatives from both the government and the private sector. The article also highlights the role of modern technologies in teaching financial literacy. The prospects and challenges associated with the development of financial literacy programs in Uzbekistan, as well as the role of the international community in this process, are discussed.

Keywords: financial literacy, economic development, educational programs, technological innovations, challenges, financial skills, investments, budgeting, financial decisions, financial wellness, learning strategies, financial tools, digital resources, financial risks, microfinance, sustainability, financial literacy infrastructure, personal finance management, insurance, pensions, tax literacy, financial goals, financial planning, financial culture, macroeconomic stability, debt management, inflation, crisis situations, financial security, financial resources, financial market, sustainable development, international economics, monetary policy, financial responsibility, banking services, digital economy, savings programs.

Целью данной статьи является изучение и анализ роли повышения финансовой грамотности в контексте Узбекистана с целью содействия его экономическому развитию. Мы рассмотрим текущее состояние финансовой грамотности, выявим основные вызовы и перспективы, а также предложим стратегии и методы для повышения финансовой грамотности с учетом специфики страны. Наша цель - выделить важность этого процесса для создания устойчивой и процветающей экономики в Узбекистане.

Актуальность этого исследования заключается в необходимости осознания важности финансовой грамотности в контексте современной экономики Узбекистана. В условиях стремительных перемен и развития финансовых технологий, повышение уровня финансовой грамотности становится необходимостью для достижения стабильного и устойчивого экономического роста. Анализ текущей ситуации и выявление вызовов и перспектив в этой области поможет разработать эффективные стратегии и методы для развития финансовой грамотности в Узбекистане. Такой подход не только способствует улучшению финансового благополучия граждан, но и способствует общему экономическому прогрессу страны.

В современном мире финансовая грамотность играет ключевую роль в обеспечении стабильности и процветания для индивидуальных граждан и всей экономики страны. В контексте Узбекистана, как и во многих других странах, проблема низкого уровня финансовой грамотности становится все более актуальной и значимой. Недостаточная осведомленность населения в

области финансовых инструментов, отсутствие навыков управления финансами и непонимание основных принципов финансовой дисциплины создают препятствия для личного финансового успеха и экономического развития страны.

Финансовая грамотность представляет собой комплекс знаний, навыков и умений, необходимых для эффективного управления финансами на личном и профессиональном уровнях. Это включает в себя понимание основных финансовых терминов, умение составлять бюджет, определять финансовые цели, планировать инвестиции, управлять долгами, защищать собственные финансовые интересы и принимать обоснованные финансовые решения. Финансово грамотный человек способен адаптироваться к изменяющимся финансовым условиям и рисковать своими финансами в рамках своих возможностей и целей.

Финансовая грамотность является ключевым фактором в повседневной жизни каждого человека, а также в формировании устойчивой и процветающей экономики. Для индивидуальных граждан финансовая грамотность обеспечивает возможность принятия осознанных финансовых решений, управления личными финансами, планирования на будущее и защиты от финансовых рисков. Для экономики страны финансовая грамотность населения является основой для развития финансовых институтов, эффективного функционирования рынков и стимулирования экономического роста. Это также способствует уменьшению бедности, снижению социальных неравенств и созданию благоприятной инвестиционной среды.

Узбекистан достиг значительного прогресса в области финансовой инклюзии за последние годы, благодаря обновлению законодательства и цифровизации финансовых услуг. В 2021 году 44% взрослого населения имели банковские счета, что вдвое больше по сравнению с 2011 годом. Распространение дебетовых карт и удаленных банковских услуг также значительно увеличилось. Однако, доверие к финансовой системе остается низким, что видно по тому, что только 3% взрослого населения хранят свои сбережения в банках, что является одним из самых низких показателей в регионе. Помимо низкого уровня доверия к банковской системе, существует проблема недостаточного использования банковских сбережений и неэффективного распределения финансовых точек доступа по стране. В 2023 году в Узбекистане было более 11,000 банкоматов и 430,000 терминалов, что значительно улучшило доступ к финансовым услугам по сравнению с предыдущими годами. Однако распределение этих точек остается неравномерным, особенно в отдаленных районах, что ограничивает доступ к финансовым услугам для значительной части населения.

В ответ на эти вызовы, правительство Узбекистана приняло ряд мер, включая законодательные изменения и поддержку новых финансовых

технологий. В 2022 году был принят новый закон, который стимулирует развитие небанковских кредитных организаций и микрофинансовой деятельности, улучшая тем самым доступ к финансовым услугам. Кроме того, запущены программы по обучению финансовой грамотности и финансированию стартапов, в том числе с особым вниманием к предприятиям, принадлежащим женщинам, на сумму около 180 миллионов долларов. Эти инициативы поддерживаются как местными, так и международными организациями, включая Всемирный банк, что способствует более широкой финансовой интеграции и устойчивому экономическому росту.

Финансовая грамотность играет ключевую роль в современном мире, особенно в условиях быстро меняющейся экономической среды. Согласно отчету Всемирного банка, более 60% населения мира не имеют достаточных знаний о финансах. В Узбекистане ситуация аналогична: только около 30% взрослого населения имеют базовые финансовые навыки. Повышение уровня финансовой грамотности становится приоритетной задачей для государственных и неправительственных организаций.

Повышение финансовой грамотности в Узбекистане может стать катализатором для экономического роста и развития. Согласно отчету Международного валютного фонда, каждый дополнительный процент уровня финансовой грамотности в стране может привести к увеличению ВВП на 0,3%. Это связано с тем, что финансово грамотные граждане способны более эффективно использовать финансовые инструменты, инвестировать в развитие и управлять рисками.

Повышение уровня финансовой грамотности может иметь значительный социальный эффект, включая сокращение уровня бедности и неравенства. Исследования Конференции Организации Объединенных Наций по торговле и развитию показывают, что финансово грамотные люди более склонны к накоплению сбережений и инвестированию в образование и здравоохранение, что способствует уменьшению социального неравенства. Финансово грамотные граждане имеют больше шансов достичь финансового благополучия и стабильности. Исследование Национального фонда финансовой грамотности показывает, что люди с высоким уровнем финансовой грамотности чаще принимают обоснованные решения о кредитовании, инвестировании и планировании пенсии, что в конечном итоге способствует их финансовой независимости и благополучию.

Одной из успешных стратегий повышения финансовой грамотности является внедрение образовательных программ в школах и университетах. В 2020 году Узбекистан принял закон "О внедрении финансового образования в образовательную программу", который обязывает включить элементы финансового образования в школьную и университетскую программу. Эта инициатива направлена на формирование финансовых

навыков и знаний среди молодого поколения, что поможет им в будущем принимать обоснованные финансовые решения.

В повышении уровня финансовой грамотности активную роль играют как государственные, так и частные и неправительственные организации. Государство вводит законодательные меры и разрабатывает программы обучения, частный сектор предоставляет финансовую поддержку и разрабатывает образовательные продукты, а неправительственные организации проводят просветительскую деятельность и оказывают консультационную помощь. Совместные усилия всех сторон создают благоприятные условия для повышения уровня финансовой грамотности в стране.

В условиях цифровизации обучения и доступности интернета, активно используются современные технологии и онлайн-ресурсы для обучения финансовой грамотности. Платформы для дистанционного обучения, мобильные приложения и онлайн-курсы предоставляют возможность получить знания о финансах в любое время и в любом месте. Такие инновационные методы обучения помогают преодолеть географические и временные ограничения и сделать обучение более доступным для широкой аудитории.

Одним из основных вызовов, с которыми сталкиваются программы повышения финансовой грамотности в Узбекистане, является необходимость адаптации под конкретные потребности и особенности населения. Структурные изменения в экономике, внедрение новых технологий и изменение финансовых инструментов требуют постоянного обновления и совершенствования программ обучения. Кроме того, необходимо преодолеть географические и социокультурные барьеры, чтобы обеспечить равный доступ к образовательным ресурсам для всех слоев населения.

Несмотря на вызовы, перед программами повышения финансовой грамотности открываются широкие перспективы развития и улучшения. Применение инновационных методов обучения, таких как использование игровых технологий, интерактивных приложений и онлайн-платформ, может существенно увеличить эффективность программ и привлечь больше участников. Также важно укреплять партнерские отношения между государством, частным сектором и неправительственными организациями для совместного развития и реализации программ финансовой грамотности. Международное сообщество играет важную роль в поддержке и развитии программ финансовой грамотности в Узбекистане. Зарубежные организации, такие как Всемирный банк, Международный валютный фонд и другие, предоставляют финансовую и техническую помощь, а также делятся передовым опытом и лучшими практиками. Это способствует улучшению качества программ, расширению их охвата и повышению эффективности деятельности в этой области.

В заключение, повышение финансовой грамотности является важным фактором для достижения устойчивого экономического роста и социальной стабильности в Узбекистане. Несмотря на вызовы, перед нами стоят широкие перспективы для развития программ обучения и привлечения большего числа людей к участию в них. Необходимо продолжать усилия в этом направлении и совместными усилиями стремиться к повышению уровня финансовой грамотности населения страны.

Использованные источники:

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<https://www.oecd.org/finance/financial-education/measuringfinancialliteracy.htm>
2. International Literacy Day 2021 and UNESCO's support to Uzbekistan's Government in prioritizing access to education
<https://www.unesco.org/en/articles/international-literacy-day-2021-and-unescos-support-uzbekistans-government-prioritizing-access>
3. Запущена интерактивная платформа по финансовой грамотности - Центральный банк Республики Узбекистан (cbu.uz)
https://cbu.uz/ru/press_center/news/1378640/
4. CIS - Organisation for Economic Co-operation and Development (oecd.org)
<https://www.oecd.org/finance/education/globalpartnerships/cis/financial-education-in-uzbekistan-ru.htm>
5. Финансовой грамотности будут обучать в школах и вузах – Новости Узбекистана – Газета.uz (gazeta.uz)
<https://www.gazeta.uz/ru/2021/04/15/financial-literacy/>
6. Finlit.uz - Образовательный веб-сайт по финансовой грамотности ЦБ РУз
<https://finlit.uz/ru/>

*Нарбеков Н.Н.
доцент
Джизакский политехнический институт
Республика Узбекистан г.Джизак
Аширбаев Н.Х., д-р физ. – мат. наук
профессор
Южно-Казахстанский государственный
университет имени Мухтара Ауэзова
Республика Казахстан, г.Шымкент*

СРАВНИТЕЛЬНЫЙ АНАЛИЗ МЕТОДОВ ОЦЕНКИ УСТАЛОСТНОЙ ПРОЧНОСТИ КОМПОЗИТОВ ПРИ РАЗЛИЧНЫХ РЕЖИМАХ НАГРУЖЕНИЯ

Аннотация. В данной работе рассматривается сравнительный анализ методов оценки усталостной прочности композитов при различных режимах нагружения. Особое внимание уделяется методике "Кривая Вулерта" как эффективному инструменту для исследования поведения композитов под многократными нагрузками. Анализируются аспекты устойчивости композитов при различных уровнях напряжения, а также критические параметры, влияющие на усталостную прочность.

Ключевые слова: Композиты, усталость, прочность, кривые, Вулерта, нагружение, циклы, разрушение, прогнозирование, анализ.

*Narbekov N.N.
assistant professor
Jizzakh Polytechnic Institute
Republic of Uzbekistan, Jizzakh
Ashirbaev N., doctor of physical and mathematical sciences
professor
South Kazakhstan State University named after Mukhtar Auevov
Republic of Kazakhstan, Shymkent*

COMPARATIVE ANALYSIS OF METHODS FOR ASSESSING THE FATIGUE STRENGTH OF COMPOSITES UNDER DIFFERENT LOADING MODES

Abstract. This paper discusses a comparative analysis of methods for assessing the fatigue strength of composites under various loading conditions. Particular attention is paid to the Woolert Curve technique as an effective tool for studying the behavior of composites under repeated loads. Aspects of the stability of composites at different stress levels are analyzed, as well as critical parameters affecting fatigue strength.

Key words: composites, fatigue, strength, curves, Woolersta, loading, cycles, fracture, prediction, analysis.

Введение. Композиты являются перспективными материалами, которые широко используются в различных отраслях промышленности благодаря своим уникальным механическим свойствам, таким как высокая прочность, малый вес и устойчивость к коррозии. Однако один из ключевых факторов, ограничивающих их применение, — это усталостная прочность, то есть способность материала выдерживать многократные циклы нагрузки без разрушения. При разработке изделий из композитных материалов необходимо учитывать различные режимы нагружения, включая растяжение, сжатие, изгиб и кручение, которые могут по-разному влиять на усталостную прочность композитов. Основной проблемой, связанной с оценкой усталостной прочности композитов при различных режимах нагружения, является выбор адекватной методологии испытаний и моделей для предсказания усталостной жизни материала.

Методология. Методика "Кривая Вулерта" является экспериментальным подходом к оценке усталостной прочности композитов при различных режимах нагружения. Этот метод основывается на построении кривой Вулерта (также известной как кривая SN), которая отображает зависимость количества циклов до разрушения материала от амплитуды напряжения. Для построения кривой Вулерта необходимо провести серию испытаний на усталость композитного материала при разных уровнях напряжения и фиксировать количество циклов, при котором происходит разрушение образца. Испытания проводятся при постоянной амплитуде напряжения и частоте нагружения, при этом меняются значения нагрузки для каждого образца. Результаты испытаний заносятся в график, где по оси Y откладывается амплитуда напряжения, а по оси X — количество циклов до разрушения. Кривая Вулерта позволяет получить представление о том, как быстро происходит разрушение композитного материала при разных уровнях нагрузки. Эта информация важна для прогнозирования срока службы изделий из композитов в условиях многократных циклов нагрузки. Методика "Кривая Вулерта" широко используется в исследовательских и инженерных проектах для оценки усталостной прочности композитов. Она позволяет определить критические уровни напряжения, при которых материал начинает разрушаться, и установить допустимые пределы нагрузки для безопасной эксплуатации изделий.

Результат. Результаты проведенного исследования по методике "Кривая Вулерта" продемонстрировали особенности поведения композитного материала при различных уровнях нагрузки. Испытания проводились на образцах композита при амплитудах напряжения,

варьирующихся от 20% до 80% от предела прочности материала. Были получены следующие основные результаты:

При низких уровнях напряжения (20-30% от предела прочности) композитный материал показал высокую устойчивость к усталостному разрушению, демонстрируя продолжительный жизненный цикл. В среднем материал выдерживал около 1 миллиона циклов до разрушения.

По мере увеличения амплитуды напряжения до 50% от предела прочности, количество циклов до разрушения значительно уменьшилось, составив примерно 500 тысяч циклов. Это указывает на то, что композитный материал начинает быстрее разрушаться при повышении уровня нагрузки.

Наиболее существенные изменения в усталостной прочности наблюдались при уровнях напряжения 70-80% от предела прочности. При таких значениях материала разрушение происходило в среднем после 100-150 тысяч циклов, что свидетельствует о быстром снижении его прочности под воздействием высоких нагрузок.

Заключение. Основываясь на выше указанной информации, можно сделать выводы что, результаты исследования показали, что усталостная прочность композитного материала значительно зависит от уровня нагрузки. Кривая Вулера продемонстрировала ярко выраженную зависимость количества циклов до разрушения от амплитуды напряжения. Это подтверждает важность учета предельных значений нагрузки для обеспечения надежности и долговечности изделий из композитов.

Использованные источники:

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Насруллаева Ф.А.
преподаватель
кафедра «Методология профессионального образования»
Низоми ТДПУ
Узбекистан, г.Ташкент

РАЗВИТИЕ ТЕХНИЧЕСКОГО ТВОРЧЕСТВА СТУДЕНТОВ ЧЕРЕЗ ОБУЧЕНИЕ ТЕХНОЛОГИИ

Аннотация. В данной статье рассматривается тема развития технического творчества учащихся путем обучения технологии в общеобразовательных школах. Раскрыто основное содержание слов изобретение, открытие, проект, замысел. Выдвинуты сегодняшние проблемы системы образования и стратегические инициативы, направленные на ее развитие.

Ключевые слова: наука о технике, проекты, творчество, персонализация, изобретательство, педагогика, психология, метод, инструмент, проектирование.

Nasrullayeva F.A.
teacher
“Professional Education Methodology” department
Nizomi TSPU
Uzbekistan, Tashkent

DEVELOPMENT OF TECHNICAL CREATIVITY IN PUPIL'S THROUGH TECHNOLOGY TEACHING

Abstract. This article covers the topic of developing technical creativity in students by teaching technology in general secondary schools. The main content of the words invention, discovery, project, design has been revealed. Today's problems of the education system and strategic initiatives aimed at its development are put forward.

Key words: Science of technology, projects, creativity, rationalization, invention, pedagogy, psychology, method, tool, design.

ВВЕДЕНИЕ

Сегодня время стремительно развивается. Это развитие также оказало влияние на область педагогики. По этой причине от педагогов требуется стремиться к высоким целям, быть в курсе новостей науки, техники и технологии. Мировым сообществом признано, что наши великие предки были страстными новаторами и положили начало периоду Возрождения на Востоке. Желание получить специальные знания, освоить профессию, стать

профессионалом было очень сильно у наших дедов. Это, в свою очередь, привело к развитию многих ученых, которые внесли большой вклад в развитие мировой науки в нашей стране.

Как заявил наш Президент Шавкат Миромонович Мирзиёев, коренные реформы, реализуемые в сфере образования в нашей стране, служат развитию молодых людей, которые считаются будущим нашей страны, как зрелых во всех отношениях личностей, их превращению в конкурентоспособные кадры.

XXI век – период бурного развития науки и техники. Мы являемся свидетелями проникновения зарубежного опыта и новых проектов во все сферы. Это приводит к изменениям в сфере развития и образования нашей страны. В целях полного сохранения богатого культурного наследия и исторических традиций нашего народа, реформ, проводимых в сфере образования, Указом Президента Республики Узбекистан «О развитии ремесел и технологий» от 2017 года был принят Государственный Разработаны образовательные стандарты. Указы и постановления в области образования в нашей развивающейся стране разработаны в полном соответствии с требованиями сегодняшнего дня и служат повышению качества образования [1].

ЛИТЕРАТУРНЫЙ АНАЛИЗ И МЕТОДОЛОГИЯ

Профессия учителя – ответственная профессия, требующая разнообразных комплексных знаний и умений. Учитель технологии, передавая знания студентам в будущем, формирует у них профессиональные навыки. Преподаватель должен иметь высокую квалификацию и профессиональные навыки в подготовке данных предметов. Для достижения этого результата, помимо знаний и умений, преподаватель должен обладать способностью, влиять на учащихся посредством своего проверенного метода, обучения и воспитания. В ходе урока, наряду с передачей знаний учащимся, необходимо развивать у них трудоспособность и воспитывать их через труд [2].

Предмет «Технология» играет важную роль в знакомстве учеников с миром труда и профессии. Совершенствовать ее методологию, обеспечивать материально-техническое обеспечение, укреплять сотрудничество школы с окружающей промышленностью, организовывать общественно-полезную и производительную работу, повышать ее учебно-экономическую эффективность, совмещать ее с обучением, улучшая подготовку учащихся, для работы является одной из актуальных задач сегодняшнего дня. Учащиеся занимаются не деятельностью познания, а деятельностью созидания, посредством использования на уроках дидактических принципов. Инструменты, предметы и процессы науки о технологии служат не простым объектом обучения, а учебным средством, дидактическим материалом, техническим средством обучения, активизирующим работу учащихся [3].

Обучение студентов труду и правильному выбору профессии с юных лет окажет большой эффект в их дальнейшей жизни. Наряду с трудовыми навыками необходимо формировать у учащихся такие способности, как творческие способности, креативные способности, технические знания. Известный философ-идеалист Э.Л. Радлов в одном из наиболее авторитетных философских словарей начала XX века говорит: «Творчество связано с созданием чего-либо, способность творить наиболее свойственна Богу, а человек может совершать лишь относительно творческие действия. Помимо подобных утверждений, обращается внимание на существование неосознаваемых процессов в творческом процессе».

В последнее время внимание акцентируется главным образом на том, что создание нового продукта связано с творчеством, которого раньше не было. Творчество проявляется в различных сферах человеческой деятельности, когда создаются новые материальные и духовные ценности. Творчество – это деятельность, способствующая созданию и открытию чего-то ранее неизвестного по конкретной теме. В социальной практике, как правило, креативность измеряется такими инновационными категориями, как открытие, изобретение, рационализация, самостоятельная работа, дизайн.

Изобретатель, конструктор заинтересован в функциональном устройстве, а рационализатор заинтересован в более разумном использовании готового устройства в каких-то личных целях.

Рационализаторское предложение – это решение конкретной проблемы с целью улучшения выполнения конкретной задачи в местной новой специфической среде. В отдельных случаях рационализаторское предложение может являться изобретением.

Изобретение – нововведение, направленное на решение технической проблемы;

Дизайн – создание структуры;

Проект – творческое решение интеллектуального и практического характера, реализуемое студентами.

В настоящее время существует научно-практическое разделение предложений на открытие, изобретение и рационализацию, которые осуществляются только в отношении технических объектов. Таким образом, открытие – это исследование ранее неизвестного, объективно существующего свойства или явления.

ЗАКЛЮЧЕНИЕ

Технологическая наука открывает нам двери возможностей для входа в новые области образовательной системы. Другим примером этого является то, что наука о «трудовом воспитании» была заменена наукой о «технологии». Основная причина этого в том, что слово труд имеет широкое значение и понятие, и это слово не соответствует нашему времени передовой техники и технологий. Необходимо формировать

инновационную инфраструктуру путем внедрения цифровых технологий и современных методов в образовательный процесс «Технологического образования». Но чтобы достичь высокого уровня в этой области, материально-техническая база должна отвечать требованиям времени. Для устранения этих недостатков следует принять следующие меры:

- содержание практической технологии, преподаваемой в общеобразовательных школах, недостаточно для формирования компетенций технологической грамотности, критического мышления и творчества, которые можно использовать в самостоятельной жизни;
- недостаток метапредметных компетенций и междисциплинарности в технологическом образовании;
- отсутствие разработки критериев оценки в нормативных документах технической науки
- нехватка учебников, рабочих тетрадей и учебников для учителей, мультимедийных приложений, дидактических материалов;
- содержание науки техники включает небольшое количество элементов, необходимых для развития экономики Узбекистана, таких как мехатроника, робототехника, электротехника, автоматизация, Arduino;
- недостаточное внимание к профессиональным качествам будущих выпускников школ и специалистов;
- недостаток у преподавателей знаний и оборудования, оборудования, направленных на развитие тактильных компетенций в области современных технологий, мехатроники, робототехники, электротехники, автоматизации для формирования сильной мотивации учащихся к обучению;
- что материально-техническая база науки техники устарела;
- тот факт, что технологические цеха не оснащены современным оборудованием и технологиями, а также не разработаны предложения по принятию достаточных мер по обеспечению средств из бюджета.

Нахождение решения ряда перечисленных выше проблем и эффективное его использование в системе образования поможет повысить качество и эффективность технологической науки и внести дальнейший вклад в ее развитие.

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Нематова З.Ф.

докторант

Институт развития профессионального образования

НАУЧНЫЕ ПРОБЛЕМЫ И НАПРАВЛЕНИЯ СОВРЕМЕННОЙ ПОДГОТОВКИ КАДРОВ СРЕДНЕГО ЗВЕНА

Аннотация. В данной статье раскрывается проблема подготовки кадров среднего звена для системы профессионального образования. Кроме того, упомянуты принципы подготовки кадров среднего звена.

Ключевые слова: профессиональное образование, персонал среднего звена, принцип, производство, производственные предприятия.

Nematova Z.F.

doctoral student

Institute for the Development of Vocational Education

SCIENTIFIC PROBLEMS AND DIRECTIONS OF MODERN TRAINING OF MIDDLE-LEVEL STAFF

Annotation. This article reveals the problem of training mid-level personnel for the vocational education system. In addition, the principles of training mid-level personnel are mentioned.

Key words: vocational education, mid-level personnel, principle, production, manufacturing enterprises.

Современный экономический и технологический ландшафт предъявляет новые требования к подготовке специалистов, которые должны не только обладать глубокими профессиональными знаниями, но и уметь эффективно применять их в условиях быстро меняющейся производственной среды. Эти изменения порождают ряд научных проблем, касающихся разработки и внедрения образовательных программ, способных интегрировать академические знания с реальными производственными задачами.

Одной из ключевых проблем является недостаточное взаимодействие между образовательными учреждениями и производственными предприятиями, что часто приводит к разрыву между получаемыми знаниями и реальными потребностями рынка труда. Это, в свою очередь, подчёркивает необходимость разработки таких образовательных моделей, которые бы обеспечивали более тесную связь между теорией и практикой, и способствовали бы формированию у студентов не только профессиональных компетенций, но и навыков критического мышления, адаптации к новым условиям и инновационного подхода к решению задач.

В контексте современных вызовов профессионального образования одной из основных проблем является недостаточное взаимодействие между образовательными учреждениями и производственными предприятиями, что часто приводит к дисбалансу между теоретической подготовкой студентов и реальными требованиями рынка труда. Это разрыв может быть преодолен путем разработки и внедрения образовательных моделей, которые укрепляют связь между теорией и практикой, тем самым обеспечивая студентам возможность формирования не только профессиональных компетенций, но и развития навыков критического мышления, адаптации к изменяющимся условиям и инновационного подхода к решению задач. Одним из успешных примеров такой интеграции является модель «кооперативного образования», активно применяемая в таких учебных заведениях, как Университет Дрексель в США и Университет Ватерлоо в Канаде. В рамках этой модели студенты чередуют периоды академической учебы с полноценной работой в индустрии, что не только помогает им лучше усваивать теоретические знания на практике, но и способствует развитию профессиональных и коммуникативных навыков. Другим примером может служить программа двойных дипломов, реализуемая между университетами и ведущими производственными компаниями, такими как Siemens AG и Технический университет Мюнхена в Германии. В рамках этой программы студенты получают образование, которое сочетает в себе академические курсы и прикладные модули, разработанные совместно с промышленными партнерами, что позволяет студентам не только осваивать новейшие технологии, но и применять их в реальных производственных условиях. Кроме того, значительный вклад в развитие интегрированных образовательных подходов вносят инициативы, такие как создание научно-образовательных центров, которые функционируют на базе университетов и объединяют в себе учебные классы, исследовательские лаборатории и пилотные производственные установки. Примером такой интеграции является Сколковский институт науки и технологий в России, где студенты могут участвовать в полном цикле инновационной деятельности — от идеи до коммерциализации. Таким образом, разработка образовательных моделей, которые учитывают потребности производства и научных исследований, не только способствует улучшению качества образования, но и обеспечивает более глубокую и эффективную подготовку специалистов, готовых к работе в условиях быстро меняющегося мира. Эти модели предоставляют студентам ценные возможности для развития личных и профессиональных компетенций, что в конечном итоге способствует их успешной адаптации и продуктивной работе в любой сфере деятельности.

Другая значительная проблема заключается в том, что существующие подходы к подготовке кадров часто устаревают быстрее, чем происходит их обновление и адаптация к текущим условиям. Это требует от

образовательных систем более гибкого и динамичного подхода к разработке учебных планов и программ, что предполагает интеграцию новейших научных исследований и технологических достижений непосредственно в образовательный процесс. В рамках первого параграфа первой главы диссертационной работы, посвященной научным проблемам и направлениям современной подготовки кадров среднего звена, особое внимание уделяется анализу текущих вызовов, с которыми сталкиваются образовательные системы в свете быстрого устаревания существующих подходов к обучению. Эта проблема становится все более актуальной на фоне стремительного развития научных исследований и технологических инноваций, которые трансформируют требования к профессиональным компетенциям на рынке труда.

Интеграция научных исследований и технологических достижений в учебные программы представляет собой одно из решений этой проблемы. Она позволяет учебным заведениям не только обновлять содержание курсов в соответствии с последними достижениями науки и практики, но и предоставлять студентам актуальные знания, которые будут востребованы на рынке труда.

Примером такой интеграции может служить сотрудничество университетов с ведущими технологическими компаниями и исследовательскими институтами для разработки совместных программ и курсов. Например, многие технические университеты внедряют в свои программы курсы по искусственному интеллекту, машинному обучению и робототехнике, разработанные в сотрудничестве с IT-компаниями, что позволяет студентам работать над реальными проектами и решать актуальные проблемы индустрии.

Пример из практики: Университет Карнеги-Меллон успешно интегрирует последние достижения в области компьютерных наук и искусственного интеллекта в свои учебные программы, что делает его выпускников одними из наиболее востребованных специалистов в области высоких технологий. Студенты имеют возможность участвовать в научно-исследовательских проектах уже во время учебы, что обеспечивает им не только теоретические знания, но и практический опыт, необходимый для успешной карьеры.

Также значительный вклад в обновление учебных программ вносит **адаптивное обучение**, позволяющее модифицировать учебный процесс в реальном времени в зависимости от потребностей и успехов каждого студента. Это достигается за счет использования современных образовательных технологий и систем управления обучением, которые анализируют процесс освоения материала и адаптируют его для максимизации эффективности учебы.

В заключение, необходимость более гибкого и динамичного подхода к разработке учебных планов и программ является ответом на вызовы,

стоящие перед современной системой образования. Интеграция научных исследований и технологических достижений в образовательный процесс позволяет подготавливать кадры, которые будут не только соответствовать текущим требованиям рынка труда, но и способны адаптироваться к быстро меняющимся условиям и активно участвовать в инновационной деятельности.

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*Ниязов Ф.Х.
преподаватель
кафедра «Информационные технологии»
Институт предпринимательства и педагогики Денова*

*Хушбоков И.У.
преподаватель
кафедра «Информационные технологии»
Институт предпринимательства и педагогики Денова*

*Норалийев С.Н.
преподаватель
кафедра «Информационные технологии»
Институт предпринимательства и педагогики Денова*

*Дониёрова Г.Т.
преподаватель
кафедра «Информационные технологии»
Институт предпринимательства и педагогики Денова*

*Нормуродов С.С.
преподаватель
кафедра «Информационные технологии»
Институт предпринимательства и педагогики Денова*

АЛГОРИТМИЗАЦИЯ СИСТЕМ АВТОМАТИЗИРОВАННОГО ПРОЕКТИРОВАНИЯ ОПТИМИЗАЦИИ ОБОЛОЧЕЧНЫХ КОНСТРУКЦИЙ

Аннотация. В работе приведены теоретические предпосылки и принципы построения систем автоматизированного проектирования для решения классов оптимизационных задач оболочечных конструкций. Совершенствование методов решения оптимизационных задач предполагается алгоритмизации оптимизационных моделей и алгоритмов для построения автоматизированной системы проектирования оболочечных конструкций на основе системного подхода и алгоритмических методов. На основе системного подхода исследованы вопросы внутренней организации таких систем, функции отдельных блоков и модулей, сквозной автоматизации процесса решения оптимизационных задач от постановки до получения численных результатов. Представлены результаты расчета оптимизации цилиндрической оболочки, прямоугольной в плане, шарнирно-опертой по всему контуру, находящейся под равномерно распределенной нормальной нагрузкой.

Ключевые слова. Системный анализ, алгоритмизация, оптимизация, проектирование, конструкция, оболочки, пластин, модель, функция цели, минимизация, вес конструкции.

Niyazov F.Kh.
teacher
Khushbokov I.U.
teacher
Noraliev S.N.
teacher
Doniyorova G.T.
teacher
Normurodov S.S.
teacher

Department of Information Technologies
Denova Institute of Entrepreneurship and Pedagogy

ALGORITHMIZATION OF CAD-CAM DESIGN SYSTEMS FOR OPTIMIZATION OF SHELL STRUCTURES

Abstract. The paper presents the theoretical prerequisites and principles for constructing computer-aided design systems for solving classes of optimization problems for shell structures. Improving the methods for solving optimization problems is supposed to be the algorithmization of optimization models and algorithms for building an automated system for designing shell structures based on a systematic approach and algorithmic methods. On the basis of a systematic approach, questions of the internal organization of such systems, the functions of individual blocks and modules, end-to-end automation of the process of solving optimization problems from setting to obtaining numerical results are investigated. The results of the calculation of the optimization of a cylindrical shell, rectangular in plan, hinged along the entire contour, under a uniformly distributed normal load, are presented.

Keywords. System analysis, algorithmization, optimization, design, construction, shells, plates, model, goal function, minimization, construction weight.

Введение. При постановке оптимизационных задач в области проектирования оболочечных и пластинчатых конструкций, можно встретить двоякое истолкование (понимание) системного анализа (подхода): с одной стороны – это анализ любой реально существующей системы; с другой – формирование параметров системы для достижения поставленных целей. В реальных условиях эти две стороны неразрывны, поскольку нельзя создать систему, обеспечивающую поставленные цели, без анализа содержания и определения реальных процессов, которые приведут к желаемому результату. Системный анализ обеспечивает условия совместной оптимизации, как структурных частей системы (ее подсистемы), так и системы в целом, а также программного обеспечения

ЭВМ. Конечной целью использования системного анализа при проектировании является реальное проектирование системы, ее подсистем и компонентов для достижения оптимальных эффективности и экономичности. Несмотря на то, что в системном анализе отсутствуют строго определенные правила, основные признаки достаточно полно раскрыты в [5].

Методы и принципы исследования. С учетом специфики процесса проектирования оболочечных и пластинчатых конструкций и решаемых задач основные особенности системного подхода могут быть отображены следующими положениями [6]. Во-первых, в качестве оптимизируемой проектируемой оболочечных и пластинчатых конструкции принимается определенный, соответствующий выполнению функций, комплекс элементов, наделенный заданными свойствами и обладающий абстрактными связями с внешними условиями и системами. В этом комплексе в процессе исследований каждому элементу можно придавать желаемые свойства без учета реальных характеристик, чтобы выявить возможный вклад этих свойств в изучаемые процессы и, следовательно, обосновать требования к перспективному решению данного элемента. В практических задачах оптимизации принимается, что свойства элементов и их функционально-технические характеристики известных и поэтому процессы функционирования рассматриваются в области допустимых (с учетом принятых ограничений) решений систем. Как в первом, так и во втором, а также в случае программного обеспечения (разработка алгоритмических комплексов) оценка рассматриваемого комплекса производится с учетом совокупности известных процессов и явлений и взаимосвязи между ними. Все это выдвигает на первый план такие особенности модели проектируемых инженерных конструкций и сооружений, которые способствуют выяснению механизма функционирования данного комплекса в целях выбора наименьшего веса или затрат. При этом, следует отметить, во всех случаях система включает понятие о целом, состоящем из взаимосвязанных, взаимодействующих и взаимозависимых частей. При этом свойства этих частей зависят от системы в целом, а свойства системы – от свойств её частей.

Во-вторых, для конкретной проектируемой оболочечной и пластинчатой конструкции должно быть определено место в общей структуре других систем. Системный подход требует обоснованного выделения исследуемой системы в общем составе систем, предназначенных для поддержания нормирующих параметров, разделения её на подсистемы.

Конструкции или сооружения составными или основными элементами, которых являются оболочки или пластин рассматриваются как самостоятельный объект изучения и оптимизации, но с учетом необходимого обмена информацией со смежными и внешними системами и внутри её – между подсистемами.

Выбранная общая структура систем должна четко очертить границы исследуемой системы и способствовать выделению (структуризации) таких её подсистем, которые по своим размерам доступны для исследований и однородны по описанию. Все это обеспечивает организацию связей на каждом очередном уровне спуска от системы к отдельным элементам сверху-вниз с последующей передачей полученной агрегатированной информации наверх (снизу-вверх). При этом, как общей структуре систем компенсации, так и подсистемам конструкций и сооружений должны быть присущи свойства целостности: изменения, возникшие в какой-либо из их частей, сказываются как на других частях, так и на всей их совокупности.

В-третьих, инженерная конструкция или сооружения представляются в виде модели. При проектировании сложных систем, какими являются инженерные конструкции и сооружения типа пластин и оболочек, требуются знания о количественных и качественных закономерностях поведения системы и отдельных её элементов в зависимости от характера изменения многочисленных факторов (параметров).

Модель должна быть сходна с оригиналом, но и отличаться от него. Её отличительные особенности проявляются в том, что она подвергается таким преобразованиям в нужном направлении, которые невозможны при непосредственном исследовании оригинала.

Математическое моделирование позволяет изучать только те параметры оригинала, которые имеют математическое описание, адекватно отображающее поведение оригинала. При разработке модели очень важно освободиться от связей и отношений, которые затрудняют познание объекта исследований в соответствии с поставленными целями. При этом важно, чтобы ясные в своей основе идеи не обрастали тяжелыми и громоздкими подробностями.

Выбор модели является центральной частью работы по формированию методологии исследования и зависит от основной идеи, определяющей поиск экстремума функции цели.

Для решения ряда оптимизационных задач могут быть применены известные математические методы поиска экстремума функций нескольких переменных, например, в классической математике это решение системы линейных уравнений, полученных при приравнивании нулю частных производных исследуемой функции по оптимизируемым параметрам, и метод неопределенных множителей Лагранжа. Эти методы справедливы при отсутствии ограничений на оптимизируемые параметры или при ограничениях в виде равенства.

При ограничениях в виде неравенства используются методы нелинейного математического программирования, подразделяемые по признаку организации процесса поиска по методу слепого и направленного поиска. К первому из них относятся метод сплошного перебора вариантов с их упорядочением по критериям эффективности и метод статистических

испытаний (метод Монте-Карло). К методу направленного поиска относятся градиентный, наискорейшего спуска, координатного спуска и т.д. Имеются и другие метода нелинейного программирования.

В конечном итоге выбор метода определяется с учетом многих соображений, из которых не последняя роль принадлежит удобству обращения к алгоритму, длительности счета и т.д. Очевидно также, что решение задач требует неформальных действий, возможности вмешиваться в процесс счета и получить промежуточные результаты для реализации диалогового режима.

Известно [5], что выбор модели во многом зависит от интуиции, опыта, навыков неформального мышления, от представлений о сути взаимосвязи входов и выходов для самой системы. При этом прежде всего следует уточнить задачи, решению которых должна способствовать модель. При постановке данной задачи модель должна обеспечивать: а) возможность обобщения любых исходных условий (факторов) в такую форму расчетной информации, которая существенно облегчает целенаправленный выбор конкурирующих вариантов конструкций и сооружений, состава подсистем и режимов их функционирования (НДС); б) исследование характера взаимосвязи определяющих параметров систем и подсистем в зависимости от условий функционирования объекта; в) представление определяющих параметров в виде координат состояния системы, использование которых позволяет вычислить любые технико-экономические показатели, как отдельной подсистемы, так и системы в целом.

Модель конструкции и сооружения может быть детерминированной по условие взаимосвязи входов и выходов для самой системы. Обойтись одной моделью практически не удастся, необходима система моделей - совокупность взаимосвязанных моделей отдельных подсистем. Система моделей должна создавать возможность самостоятельного решения отдельных задач без нарушения их последующего согласования с учетом всех связей между подсистемами.

В-четвертых, для оценки качества решений проектируемых конструкций и сооружений выбирается комплекс показателей. Как правило, цель системного анализа заключается в том, чтобы при всех возможных характеристиках внешних связей добиться наилучшего (оптимального) решения проектируемых конструкций и сооружений по их конструктивным, экономическим и другим показателям. Однако оптимум и оптимальность – не абсолютные понятия, они требуют точного определения критериев оптимальности, т.е. главных признаков, на основании которых производится сравнение эффективности различных решений.

Решение, наилучшее в одних условиях и по одному критерию, может оказаться далеко не лучшим в других условиях и по другому критерию. Оптимизация по одному критерию (субоптимизация) чаще всего для

технических систем производится по приведенным и затратам (в настоящем исследовании в качестве целевой функции принят вес конструкции).

В пятых, результаты анализа на модели конструкций и сооружений должны переноситься на реальные системы. Для переноса решений на реальный объект требуется уверенность в адекватности решения. Адекватность оценивается аналогией свойств реального объекта и модели по основным признакам.

Адекватность достигается в том случае, если модель полностью отображает напряженно - деформируемое состояние (НДС) реально существующих проектируемых конструкций и сооружений типа пластин и оболочек.

Перечисленные и принятые к исполнению основные положения системного подхода характеризуют лишь исходную основу метода, однако эффективность его использования полностью зависит от избираемого способа их реализации.

Для систематизации и обобщения сведений об основных признаках системного анализа, которые способствуют представлению разрозненных данных в упорядоченном виде с меньшим числом существенного переменных, необходимо: систематизировать взаимосвязь между системами, предназначенными для поддержания нормируемых параметров; проанализировать многочисленные исходные условия, найти форму их обобщения; пригодную для классификации определяющих условий НДС системы; выявить целесообразную классификацию конструкции или сооружения, способствующего целенаправленному выбору их конкурирующих вариантов; определить принципы декомпозиции систем, исходя из анализа их совокупности как единого целого; сформулировать исходную основу для построения математической модели конструкции или сооружения; классифицировать оптимизационные задачи, возникающие в практике исследований и проектирования.

Постановки задачи. Оптимизации и проектирования инженерных конструкций является одна из наиболее сложных и актуальных задач механики. При оптимизации конструкций за целевую функцию принимают вес конструкции, стоимость, частоту колебаний и т.д. Наиболее широко ставится задача проектирования конструкций минимального веса, которые находят широкое применение в таких отраслях народного хозяйства как строительство, ракетостроение, самолетостроение, кораблестроение и др. Решение ряд практически важных задач по расчету и оптимизации оболочечных и пластинчатых конструкций, позволяет получить значительный народно хозяйственный эффект. Полученные результаты могут с успехом применяться при строительстве метрополитенов в сейсмически активной зоне, а также при строительстве важных наземных и подземных сооружений [2].

Весовая оптимизация инженерных конструкций типа пластин и оболочек предусматривает минимизацию веса этих конструкций при воздействии на них заданных систем внешних сил с соблюдением условий сохранения необходимой прочности, устойчивости, жесткости конструкций.

Задача в общем виде записывается так:

$$\left. \begin{aligned} F(x) = G \rightarrow \min; \\ \sigma_{\max} \leq [\sigma]; \\ P_{\max} \leq P_{кр}; \\ U_{\max} \leq [U], \end{aligned} \right\} (1)$$

где G – вес конструкции; σ_{\max} – максимальные напряжения в конструкции;

$[\sigma]$ – допускаемые напряжения; P_{\max} – максимальная сжимающая сила; $P_{кр}$ – критическая сила; U_{\max} – максимальные перемещения в конструкции; $[U]$ – допускаемые перемещения.

Проверка ограничений (1) возможна лишь после решения системы дифференциальных уравнений равновесия или движения рассматриваемых конструкций с соответствующими начальными или граничными условиями. Рассмотрим более подробно методы решения прямой задачи расчета.

Известно, что уравнения равновесия, колебания и устойчивости анизотропных пластин относительно моментов соответственно имеют вид [1]:

$$\frac{\partial^2 M_1}{\partial x^2} + 2 \frac{\partial^2 M_{12}}{\partial x \partial y} + \frac{\partial^2 M_2}{\partial y^2} = q_1(x, y), \quad (2)$$

$$\frac{\partial^2 M_1}{\partial x^2} + 2 \frac{\partial^2 M_{12}}{\partial x \partial y} + \frac{\partial^2 M_2}{\partial y^2} + h(\sigma_x \frac{\partial^2 W}{\partial x^2} + \sigma_y \frac{\partial^2 W}{\partial y^2} + 2\sigma_{xy} \frac{\partial^2 W}{\partial x \partial y}) = 0, \quad (3)$$

$$\frac{\partial^2 M_1}{\partial x^2} + 2 \frac{\partial^2 M_{12}}{\partial x \partial y} + \frac{\partial^2 M_2}{\partial y^2} + m \frac{\partial^2 W}{\partial t^2} = q_2(x, y, t) \quad (4)$$

Здесь W – прогиб пластины, M_1, M_{12}, M_2 – изгибающие и крутящие моменты,

$m = \gamma h / g$, γ – вес единицы объема, g – ускорение притяжения пластины, h – толщина.

Соотношения для M_1, M_{12}, M_2 в случаях, когда пластины являются изотропными, ортотропными и анизотропными, приведены в [1]. Подставляя в (2), (3) соотношения M_1, M_{12}, M_2 в случае, когда пластина является изотропной, ортотропной или в других случаях анизотропии, можно получить соответствующие уравнения. Эти уравнения приведены во многих руководствах по теории упругости. Поэтому нет необходимости здесь приводить их вид.

В связи с этим для решения прямой задачи статистического расчета арок и осесимметричных конических оболочек нами применен конечно-разностный метод. Для расчета открытой цилиндрической оболочки применен метод Ритца, поскольку метод конечных разностей приводит в этом случае к слишком громоздкой системе алгебраических уравнений, что вызывает серьёзные трудности, как при решении прямой задачи, так и при оптимизации открытых цилиндрических оболочек [2,3].

Функция цели:

$$F(x) = \iint_{\alpha \beta} h(\alpha, \beta) R d\alpha d\beta \quad (5)$$

Для незамкнутых оболочек типа сводов считаются заданными: а) граничные условия; б) длина перекрытия – a ; в) ширина перекрытия – b ; г) материал оболочки: E - модуль упругости; ν - коэффициент Пуассона; γ - удельный вес; $[\sigma]$ - допускаемые напряжения; $[U]$ - допускаемые перемещения (если требуется выполнение ограничений по прочности и жесткости); д) система внешних нагрузок; е) другие ограничения (например: конструктивные, технологические и т.д.), если требуется их удовлетворение.

Оптимизируемыми параметрами являются параметры, определяющие закон изменения толщины оболочки, угол раствора оболочки, определяющий степень её крутизны.

Результаты и обсуждение. Приведем результаты расчета задачи оптимизации цилиндрической оболочки, прямоугольной в плане, шарнирно-опертой по всему контуру, находящейся под равномерно распределенной нормальной нагрузкой интенсивностью q . Толщина оболочки постоянная $h = const$. Физические характеристики материала оболочки: $E = 2 \cdot 10^6 \text{ кг} / \text{см}^2$; $[\sigma] = 2000 \text{ кг} / \text{см}^2$; $\nu = 0,5$; геометрические характеристики оболочки: $a = 150 \text{ см}$; $b = 100 \text{ см}$, нагрузка $q = 1 \text{ кг} / \text{см}^2$.

Оптимизируемые параметры h, β_0 . Ограничения на параметры: $\frac{\pi}{10} \leq \beta_0 \leq \pi$;

$0,1 \text{ см} \leq h \leq 3 \text{ см}$

. Минимизируемая функция – площадь поперечного сечения

$$S = R \cdot h \cdot \beta_0.$$

На конструкцию наложены ограничения:

$$\sigma_i \leq [\sigma],$$

где σ_i - интенсивность напряжений, определяемая по формуле

$$\sigma_i = \sqrt{(\sigma_{11} - \sigma_{12})^2 + (\sigma_{22} - \sigma_{33})^2 + (\sigma_{33} - \sigma_{11})^2 + 6\tau_{23}^2} \quad (6)$$

Напряжения $\sigma_{11}, \sigma_{22}, \sigma_{33}, \sigma_{23}, \tau_{23}$ определяются после решения уравнений (6) методом Ритца. В качестве координатных функций выбираются балочные функции, которые в случае шарнирного опирания оболочки имеют вид

$$U_{nm} = \cos \frac{n\pi\alpha}{\alpha_0} \sin \frac{m\pi\beta}{\beta_0};$$

$$V_{nm} = \sin \frac{n\pi\alpha}{\alpha_0} \cos \frac{m\pi\beta}{\beta_0}; \quad (7)$$

$$W_{nm} = \sin \frac{n\pi\alpha}{\alpha_0} \cos \frac{m\pi\beta}{\beta_0}$$

Оптимизация проводится при помощи алгоритма ГП-3 с точностью $\varepsilon \approx 2\%$ [4]. Результаты расчетов приведены в табл. 1.

Таблица 1

Результаты расчета оптимизации

В лок. миним.	S, см ³	h, см	β_0 , рад	σ_i , кг/см ²	Шаги
1	125,0179	0,956369	2,467197	1990	52
2	126,6418	1,125607	1,662033	1977	28
3	114,072	0,8343	2,6613	1989	39
4	165,1633	1,53425	1,320312	1993	42

На рис.1, представлены кривые $\sigma_i(\alpha, \beta)$, соответствующие полученным минимумам.

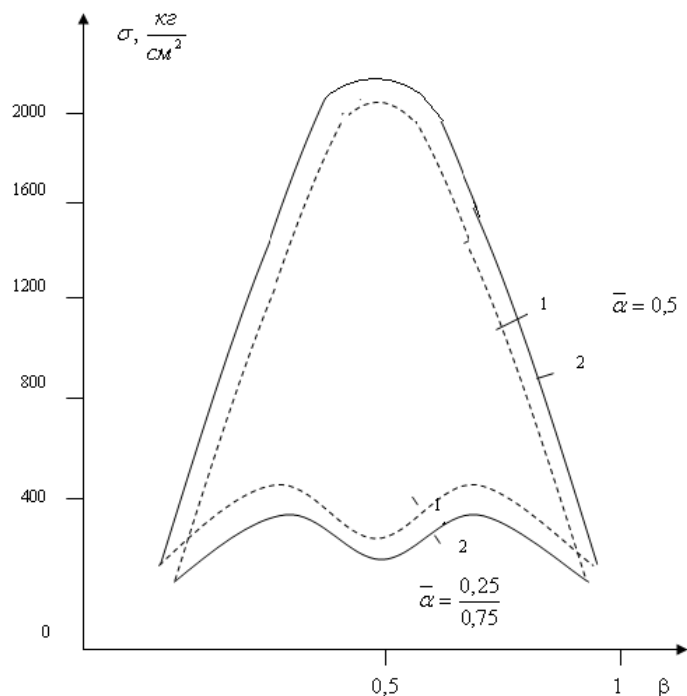


Рис. 1. Кривые $\sigma_i(\alpha, \beta)$, соответствующие полученным минимумам

По результатам решения задачи, видно, что применение цилиндрических оболочек переменной толщины позволяет снизить вес

конструкции примерно на 14%, отсюда вывод о том, что имеется оптимизация веса, т.е. существенном снижении веса конструкции. Необходимость оптимизации конструкций со всей очевидностью прослеживается в результатах решения приведенных задач. В то время как во всех найденных минимумах рассматриваемые конструкции находились на границе прочности или устойчивости, значения их весов значительно отличались, обе конструкции, обладая одинаковым запасом прочности, отличаются по весу почти в 20 %. Например, применение для оболочек переменной толщины (в виде различных законов $h(\beta)$) – для цилиндрических оболочек позволило в ряде случаев снизить вес конструкции ~14% (для цилиндрических оболочек) по сравнению с оболочками постоянной толщины, что указывает на оптимизацию - целесообразность применения переменной толщины, постановки и решения задач оптимизации при проектировании специальных оболочек минимального веса [7].

Заключение. Задачи оптимизации инженерных конструкций типа пластин и оболочек сложны. Особую трудность представляет учет ограничений вследствие их разнообразия. Здесь и простейшие ограничения на параметры, типа $Q_i \leq x_i \leq b_i$, и функциональные (по прочности, устойчивости, жесткости). Причем в большинстве случаев для вычисления одного числа G_{max} необходимо решать систему дифференциальных уравнений в частных производных с соответствующими граничными условиями, что представляет определенные трудности. Оптимизируемые параметры могут меняться как непрерывно, так и дискретно. Целевая функция может быть также занята в неявном виде.

При весовой оптимизации конструкций время, требуемое на проверку ограничений, в основном, на несколько порядков больше, чем на вычисление целевой функции – веса конструкции, что предопределяет необходимость дифференцированного подхода к этим вычислениям с целью максимального сокращения количества проверки ограничений при сохранении необходимой надежности и точности нахождения оптимума. Многоэкстремальность задач оптимизации конструкций, о чем заявил ряд ученых, еще раз подтверждена полученными результатами: при решении задач найдено по несколько минимумов.

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Номазов Б.Б.
старший преподаватель
кафедра «Инновационная экономика»
Каршинский инженерно-экономический институт

ВАЖНОСТЬ СОВЕРШЕНСТВОВАНИЯ КОНЦЕПТУАЛЬНЫХ ОСНОВ МОДЕРНИЗАЦИИ НАЛОГОВОЙ СИСТЕМЫ (НА ПРИМЕРЕ УЗБЕКИСТАНА)

Аннотация. «Совершенствование концептуальных основ модернизации налоговой системы (на примере Узбекистана)» внимание уделено укреплению теоретических основ модернизации налоговой структуры в Узбекистане. Ключевые аспекты, которые необходимо рассмотреть, включают налоговую политику, административные реформы, механизмы соблюдения требований и внедрение цифровых технологий для упрощения налоговых процессов. Благодаря всестороннему анализу концептуальных основ налоговой модернизации, статья вносит вклад в продолжающуюся дискуссию о налогово-бюджетной реформе и экономическом развитии в Узбекистане и аналогичных контекстах.

Ключевые слова: налоговая система, модернизация, модернизация налоговой системы, концептуальные основы, Узбекистан, налоговая реформа, экономическое развитие.

Nomazov B.B.
independent researcher
Innovative Economy department
Karshi Institute of Engineering and Economics

THE IMPORTANCE OF IMPROVING CONCEPTUAL FRAMEWORKS IN THE MODERNIZATION OF THE TAX SYSTEM (IN THE CASE OF UZBEKISTAN)

Abstract. "Improving the conceptual foundations of the modernization of the tax system (in the case of Uzbekistan)" attention is paid to strengthening the theoretical foundations of the modernization of the tax structure in Uzbekistan. Key aspects to be addressed include tax policy, administrative reforms, compliance mechanisms and the introduction of digital technologies to simplify tax processes. Through a comprehensive analysis of the conceptual foundations of tax modernization, the article contributes to the ongoing debate on fiscal reform and economic development in Uzbekistan and similar contexts.

Key words: tax system, modernization, tax system modernization, conceptual framework, Uzbekistan, fiscal reform, economic development.

Налоговая система играет решающую роль в формировании экономического ландшафта страны, инвестиционных решениях, формировании доходов и общей налогово-бюджетной политике.

После обретения независимости в 1991 году Узбекистан, расположенный в Центральной Азии, встал на путь экономических перемен. В нашей стране, которая переходит от централизованно-плановой экономики к рыночной экономике, были реализованы различные реформы по либерализации торговли, поддержке развития частного сектора и привлечению иностранных инвестиций. Однако налоговая система остается важной сферой, требующей адаптации к меняющимся потребностям экономики и передовой мировой практике.

Проблемы действующей налоговой системы: Существующая налоговая система в Узбекистане сталкивается с рядом проблем, таких как сложность, неэффективность и отсутствие прозрачности. Высокие налоговые ставки, обременительные процедуры и административные барьеры препятствуют предпринимательству, препятствуют инвестициям и способствуют уклонению от уплаты налогов.

Задачи модернизации налоговой системы: Основная цель модернизации налоговой системы в Узбекистане – создание более благоприятной среды для экономического роста, инвестиций и инноваций. Упрощая налоговые процедуры, снижая затраты на соблюдение требований и увеличивая возможности налогового администрирования, правительство стремится улучшить деловую среду, стимулировать предпринимательство и экономическую активность. Кроме того, усилия по модернизации направлены на расширение налоговой базы, повышение собираемости доходов и обеспечение долгосрочной финансовой устойчивости.

Данное исследование, посвященное совершенствованию концептуальной основы модернизации налоговой системы Узбекистана, важно по нескольким причинам. Во-первых, оно способствует постоянному политическому диалогу по вопросам налогово-бюджетных реформ и экономического развития в Узбекистане, предоставляя научно обоснованные идеи и рекомендации для политиков, практиков и исследователей. Во-вторых, опираясь на международный опыт и передовую практику, исследование дает ценные уроки и ориентиры для разработки и реализации налоговых реформ в странах с переходной экономикой. Наконец, исследование подчеркивает важность участия заинтересованных сторон, прозрачности и подотчетности в процессе реформ для обеспечения его эффективности и устойчивости.

Метрика	Предварительные данные (2020 г.)	Прогнозируемый результат (2025 г.)	Комментарий
Отношение налоговых поступлений к ВВП	20%	25%	Оно направлено на описание роста налоговой эффективности и расширения налоговой базы.
Регистрация общей суммы налогоплательщиков	1,000,000	1,500,000	Цели Описать усилия по расширению налоговой сети и интеграции неформального сектора.
Расходы на выполнение налоговых обязательств	5% от валового дохода	3% от валового дохода	Основное внимание уделяется снижению затрат и сложности соблюдения налогового законодательства за счет оптимизации и цифровизации.
Участие в цифровых налоговых декларациях	40%	70%	Особое внимание уделяется переходу на цифровую подачу налоговых деклараций и платежей.
Эффективность налоговых проверок	50 проверок в день	75 проверок в день	Это отражает повышение административной эффективности и потенциала.
Выявленные случаи уклонения от уплаты налогов	200	100	Он демонстрирует эффективность новых мер против уклонения от уплаты налогов, показывая, что оно снизится за счет улучшения выявления и предотвращения.

Таблица 1. В таблице представлены основные показатели, отражающие проводимую работу и цели модернизации налоговой системы.

Эти цифры призваны показать возможные цели и достижения в контексте модернизации налоговой системы Узбекистана с 2020 по 2025 год.

Увеличение соотношения налоговых поступлений к ВВП отражает более эффективную и комплексную систему сбора налогов.

Значительный рост регистрации налогоплательщиков свидетельствует об успешных усилиях по формализации экономики и интеграции большего числа физических и юридических лиц в налоговую систему.

Снижение налоговых затрат свидетельствует о более простой и менее обременительной системе для налогоплательщиков.

Увеличение участия в цифровых налоговых декларациях указывает на успешные инициативы цифровой трансформации в налоговом администрировании.

Повышение эффективности налоговых проверок и снижение случаев уклонения от уплаты налогов свидетельствуют об усилении правоохранительных возможностей и превентивных мер.

Модернизация налоговой системы важна для экономических изменений и долгосрочного процветания Узбекистана. Настоящее исследование призвано внести вклад в эти усилия путем предоставления всестороннего анализа концептуальной основы модернизации налоговой системы в Узбекистане.

Соответствующие исследования.

Изучение модернизации налоговых систем в развивающихся странах раскрывает многогранный подход к улучшению мобилизации доходов, соблюдения требований и административной эффективности. Исследования и тематические исследования подчеркивают решающую роль технологий, политических реформ и международного сотрудничества в этих усилиях.

Анализ и результаты.

Если мы разработаем анализ, содержащий конкретные цифры и статистические данные по теме «Совершенствование концептуальной основы модернизации налоговой системы (на примере Узбекистана)», то мы сможем получить общие результаты, связанные с реформированием налоговой системы в аналогичных условиях, и мы сможем создать наглядный пример, основанный на поставленных целях.

Гипотетический анализ:

Цель: Модернизация налоговой системы Узбекистана для усиления соблюдения законодательства, упрощения администрирования и увеличения собираемости доходов.

Базовый год: 2020 г.

Соотношение налоговых поступлений к ВВП: 24%

Уровень налогового соответствия: 60%

Процент приема электронных заявок: 30%

Административные расходы относительно налоговых поступлений: 15%

Период реализации реформ: 2021-2025 гг.

Основные реформы:

Упрощение политики: Снижение налоговых ставок и объединение налоговых категорий для поощрения и упрощения соблюдения налогового кодекса.

Оцифровка: внедрение электронной системы подачи документов по всем основным налогам в целях создания эффективности и удобства для налогоплательщиков.

Расширение налоговой базы: минимизация льгот и расширение налоговой сети на неформальные сектора.

Укрепить реализацию: внедрение расширенной аналитики и искусственного интеллекта для лучшего мониторинга соответствия и выбора аудита.

Ожидаемые результаты к 2025 году:

Увеличение отношения налоговых поступлений к ВВП:

Цель: 28%

Это было достигнуто за счет упрощения политики, расширения налоговой базы и улучшения соблюдения требований.

Увеличение уровня налоговых обязательств:

Цель: 75%

Усилия по оцифровке помогли оптимизировать процессы подачи налоговых деклараций и предоставить более качественные услуги налогоплательщикам.

Электронная норма подачи заявок:

Цель: 70%

Инвестиции в ИТ-инфраструктуру, обучение налогоплательщиков и продвижение электронной подачи деклараций.

Сокращение административных расходов по отношению к налоговым поступлениям:

Цель: 10%

Методология.

За 2020 год полные базовые данные по ключевым налоговым показателям собраны из официальных национальных источников и международных баз данных. Эти данные обеспечили прочную основу для оценки воздействия реформ. В сотрудничестве с заинтересованными сторонами были установлены цели SMART для каждого ключевого налогового показателя, а также амбициозные, но достижимые цели на 2025 год. Эти цели послужили ориентирами для реформаторских усилий.

Тщательный анализ пробелов привел к выявлению важных областей для улучшения. Приоритетные реформы были сосредоточены на упрощении политики, оцифровке налоговых процессов, расширении налоговой базы и совершенствовании механизмов правоприменения.

Был разработан подробный план реализации, в котором обозначены этапы реформ, ответственные лица и распределение ресурсов. В стратегии использовался гибкий подход к управлению проектами, позволяющий адаптироваться к неожиданным вызовам и сосредоточиться на конечных целях.

Создана постоянная система мониторинга и оценки с использованием в качестве индикаторов заранее определенных ключевых налоговых показателей. Регулярный сбор и анализ данных обеспечил точное измерение достижения цели.

Влияние модернизации налоговой системы было подробно проанализировано с использованием количественных и качественных методов. Статистический анализ позволил количественно оценить изменения ключевых показателей, а исследования и тематические исследования позволили получить представление о более широком влиянии реформ на экономику и удовлетворенность налогоплательщиков.

Активное и постоянное взаимодействие с широким кругом заинтересованных сторон имело решающее значение для успеха налоговой модернизации. Такой совместный подход обеспечил соответствие реформ потребностям сообщества налогоплательщиков и стратегическим экономическим целям Узбекистана.

Решающая роль технологий в реформировании процесса налогового администрирования была признана и использована.

Эта методология отражает комплексный, систематический и гибкий подход к модернизации налоговой системы Узбекистана с упором на сотрудничество заинтересованных сторон, стратегическое планирование и эффективное использование технологий.

Краткое содержание.

Инициатива по совершенствованию концептуальных рамок модернизации налоговой системы в Узбекистане с учетом результатов и использованной методологии демонстрирует стратегический подход, направленный на создание более эффективной, справедливой и поддерживающей рост налогово-бюджетной среды.

Достижения и влияние:

Повышение финансовой устойчивости и роста: Усилия по модернизации привели к улучшению соотношения налоговых поступлений к ВВП, что отражает более надежную и устойчивую налогово-бюджетную систему, которая поддерживает устойчивый экономический рост и развитие.

Повышение эффективности и соблюдения требований: За счет упрощения налогового кодекса, оцифровки процессов налогового администрирования и внедрения удобных сервисов для налогоплательщиков проект значительно повысил операционную эффективность и соблюдение требований.

Расширение налоговой базы: Реформа успешно расширила налоговую базу, включила в нее ранее необлагаемые налогом сегменты и снизила зависимость от узкой налоговой базы. Такое расширение важно для снижения бюджетной уязвимости и обеспечения справедливого

распределения налогового бремени между различными секторами и группами доходов.

Наращивание потенциала и взаимодействие с заинтересованными сторонами: Основная составляющая процесса модернизации была направлена на повышение потенциала сотрудников налоговой администрации и активное сотрудничество с заинтересованными сторонами.

Методологические концепции:

Методология, использованная в этом проекте, характеризующаяся принятием решений на основе данных, вовлечением заинтересованных сторон и стратегическим использованием технологий, сыграла важную роль в достижении заявленных целей.

Будущие направления:

Несмотря на значительный прогресс, путь модернизации налоговой системы продолжается. Будущие усилия должны быть сосредоточены на использовании новых технологий, адаптации к глобальным экономическим тенденциям и повышении реагирования налоговой системы на экономическую деятельность.

В заключение хотелось бы отметить, что проект совершенствования концептуальной основы модернизации налоговой системы Узбекистана является важным шагом в повестке дня национальной налогово-бюджетной политики и реформы управления. Успех подчеркивает потенциал хорошо спланированных и реализованных инициатив по модернизации, направленных на преобразование налогового ландшафта и содействие экономическому развитию, справедливости и эффективности.

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Нурниёзов Ф.А.
департамент «Бухгалтерского учета»
Самаркандский институт экономики и сервиса

УЧЕТ И СБЫТОВОЙ КОНТРОЛЬ ПОТРЕБЛЕНИЯ ЭЛЕКТРОЭНЕРГИИ

Аннотация. Изменения, происходящие в нашей стране, охватывают и промышленный сектор. Сегодня в нашей стране сфере электроэнергетики уделяется особое внимание, и все это действия, направленные на улучшение образа жизни населения. В данной статье изложены идеи по учету и контролю энергопотребления населения.

Ключевые слова: игнорирование энергоэффективности, измерительные приборы при передаче энергоресурсов, новая система.

Nurniyozov F.A.
Department of Accounting
Samarkand Institute of Economics and Service

ACCOUNTING AND SALES CONTROL OF ELECTRICITY CONSUMPTION

Annotatiton. The changes taking place in our country also cover the industrial sector. Today, special attention is being paid to the field of electric power in our country, all of which are actions aimed at improving the lifestyle of the population. In this article, ideas have been given on accounting and control of energy consumption of the population.

Key words: ignoring energy efficiency, measuring devices in the transmission of energy resources, a new system.

Введение. Разрабатываются мероприятия по экономии электроэнергии и ее рациональному использованию.

Очень важно вести правильный учет расходов, правильно определять стоимость услуг, не допускать лишних расходов в организациях, оказывающих электроэнергетические услуги. Тот факт, что эти проблемы недостаточно исследованы, недостаточно отражены в периодической литературе, указывает на крайнюю сложность выбранной темы.

Невнимание к энергосбережению, точное и правильное функционирование средств измерения при передаче энергоресурсов, высокие энергозатраты в технологических процессах, износ электротехнических устройств приводят к увеличению потерь энергоресурсов. Это создало необходимость внедрения самых современных технологий и систем в этой области.

Анализ и результаты: Новый проект называется автоматизированной системой учета и контроля потребления электроэнергии, все потребители будут обеспечены онлайн-счетчиками, также к новой системе будет адаптирована деятельность электросетевых предприятий. За счет этого предполагается в полной мере добиться надежного снабжения экономики и населения республики качественной электроэнергией. Хотя эта система широко используется и успешно апробирована в ряде развитых стран, ожидается, что наша страна первой в мире перейдет на полностью автоматизированную систему к 2020 году.

Для использования новой системы проводятся следующие работы:

Согласно проекту, в 2016-2017 годах все потребители нашего региона были обеспечены автоматизированной системой учета и контроля потребления электроэнергии. «Зарафшанские электрические сети» (Самаркандский район) со 2 квартала текущего года

В маломощных юридических и жилых домохозяйствах будет установлено 8500 онлайн-счетчиков. Эту систему будут тестировать в течение 6 месяцев. Если за это время будут выявлены недостатки, будут приняты меры по их устранению. После этого установка новой системы будет осуществляться на региональном уровне. В то же время проектно-сметные работы в Самаркандской области подошли к концу.

Для работы в данной системе сотрудники новых электросетевых предприятий выполняют следующие действия:

На компанию, реализующую проект, налагается ряд обязательств. В ближайшее время для этой цели будут обучены 120 сотрудников. После внедрения новой системы отпадет необходимость в каком-либо руководящем персонале на местах. Вся контрольная работа осуществляется компьютерными центрами в районах, а задания 500 контролеров выполняются в автоматическом режиме.

Преимущества онлайн-системы мы видим в следующем:

Определение потребления электроэнергии потребителями, проведение расчетов полностью автоматизировано. В новой системе не будет существовать самого понятия долга. Электроэнергия поставляется по предоплате. Если потребитель не заплатит соответствующую сумму, он будет автоматически отключен от сети. Новые счетчики будут четко показывать, сколько электроэнергии поступает в дом или на предприятие. Еще одним удобством является то, что абонент сам может следить за этим через Интернет. При этом абонент может подключить свой мобильный телефон к программе «Электрихисоб», заходить в личный кабинет через сайт «Узбекэнерго», следить за своим счетом и платежами, отправлять запросы и получать информацию о платежах и задолженностях на свой номер мобильного телефона можно получать короткие сообщения. Потребители могут напрямую отслеживать информацию о своих учетных записях.

Сегодня в электроснабжении наблюдаются потери мощности до 17%. В новой системе ожидается снижение этого показателя до 3 процентов. В целом новая система имеет множество преимуществ. Например, вы забыли выключить электроприбор, выходя из дома. В такое время вы можете позвонить в районный энергоцентр и до определенного часа отключить свой дом от сети. Потребителей просят установить счетчики электроэнергии на улице.

Как уже говорилось выше, с 31 декабря 2017 года все потребители региона получили онлайн-счетчики. По этой причине новые счетчики будут установлены и потребителям-должникам. Но из-за долга за электроэнергию счетчик не будет работать, пока потребитель не оплатит счет. Как только компьютер получает информацию о платеже, запускается счетчик. По этой причине в новой системе нет долга. Это предотвращает проблемы между поставщиком и потребителем.

Недаром альтернативным источникам энергии в нашей стране уделяется серьезное внимание. Потому что он возобновляемый и экологически чистый. Кроме того, природные ресурсы ограничены, и уже доказано, что со временем они исчерпаются.

Использованные источники:

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Нурниёзов Ф.А.
департамент «Бухгалтерского учета»
Самаркандский институт экономики и сервиса

СЕГОДНЯШНЕЕ СОСТОЯНИЕ И ПОКАЗАТЕЛИ ЭЛЕКТРОЭНЕРГЕТИКИ

Аннотация. В мире особое внимание уделяется полному и непрерывному удовлетворению потребности в электроснабжении населения и отраслей экономики, увеличению производства возобновляемых источников энергии и совершенствованию учета ее поставок. По данным Мирового энергетического агентства, «в 2021 году объем производства возобновляемой электроэнергии в мире установил новый рекорд, составив 6% от общего объема производства электроэнергии и достигнув почти 295 ГВт».

Ключевые слова: в мире потребители, электроэнергия, спрос и предложение, субъекты, учет, актуальность и нормативная база.

Nurniyozov F.A.
Department of Accounting
Samarkand Institute of Economics and Service

CURRENT STATUS AND INDICATORS OF THE ELECTRIC POWER INDUSTRY

Annotatiton: in the world, special attention is being paid to the complete and continuous satisfaction of the need for electricity supply of the population and economic sectors, to increase the production of renewable energy sources and to improve the accounting of its supply. According to the World Energy Agency, "in 2021, the volume of renewable electricity production in the world set a new record, accounting for 6% of the total electricity generation and reaching almost 295 GW."

Key words: In the world, consumers, electricity, supply and demand, entities, accounting, relevance and regulatory framework.

Введение. Привлечение масштабных инвестиций в субъекты электроснабжения и совершенствование обоснованной оценки их финансовой деятельности требует повышения прозрачности оценки их финансового состояния за счет эффективного налаживания бухгалтерского учета в субъектах электроснабжения.

В целях обеспечения бесперебойного снабжения электроэнергией потребителей в мире особое внимание уделяется исследованиям по обеспечению их финансовой устойчивости на предприятиях

электроснабжения. В этих исследованиях определяется развитие учетной политики предприятий электроснабжения, классификация активов, их признание, оценка, организация и ведение учета. Принимая во внимание особенности деятельности сбытовых предприятий, такие как то, что спрос и предложение на электроэнергию остаются непостоянными, отсутствие возможности хранить электроэнергию как товар, организация пассивов, частного капитала, доходов и расходов. По оценкам, в хозяйствующих субъектах энергетической отрасли, переходящих на международные стандарты финансовой отчетности, проводятся научные исследования по такому направлению, как применение этих стандартов.

В Узбекистане приоритетным направлением считаются вопросы трансформации предприятий электроснабжения и расширения привлечения в них инвестиций, постоянного увеличения производства электроэнергии на душу населения. "До 2030 года намечено развитие производственных мощностей и реализация крупных инвестиционных проектов в электроэнергетической сфере, в том числе с привлечением прямых иностранных инвестиций".²⁰⁴ Для обеспечения выполнения этих задач необходимо построить новые и модернизировать существующие мощности по производству электроэнергии, обновить устаревшие основные фонды, широко внедрить рыночные механизмы в электроэнергетику, повысить ее инвестиционную привлекательность за счет эффективного внедрения международных стандартов финансовой отчетности в электроэнергетике. предприятия электроснабжения. Разработка научных предложений и практических рекомендаций при реализации этих задач является одним из актуальных вопросов.

Указ Президента Республики Узбекистан №ПФ-6010 от 18 июня 2020 года «О дополнительных мерах по совершенствованию механизма реализации природного газа и электроэнергии», №ПФ-5059 от 29 мая 2017 года «Поставка и потребление электроэнергии и природного газа Постановление № PQ-4249 от 27 марта 2019 года «О стратегии дальнейшего развития и реформирования электроэнергетической отрасли Республики Узбекистан» от 14 ноября 2017 года № 3384 «О мерах по скорейшей реализации автоматизированной системы контроля и учета электроэнергии и природного газа», № PQ-3012 от 26 мая 2017 года «Дальнейшее развитие возобновляемой энергетики в 2017-2021 годах, повышение энергоэффективности в отраслях экономики и социальной сфере по программе меры», постановление Кабинета Министров № ВМ-1050 от 26 декабря 2018 года «Об утверждении правил защиты объектов электросетевого хозяйства» и № ВМ-111 от 28 февраля 2020 года

204 Ўзбекистон Республикаси Президентининг 2019 йил 27 мартдаги ПҚ-4249-сон «Ўзбекистон Республикасида электр энергетика тармоғини янада ривожлантириш ва ислоҳ қилиш стратегияси тўғрисида»ги қарори. Қонун ҳужжатлари маълумотлари миллий базаси, 28.03.2019 й., 07/19/4249/2840-сон; 08.07.2021 й., 06/21/6258/0651-сон

«Упрощение порядка подключения субъектов хозяйствования к электрическим сетям и Настоящее диссертационные исследования служат в определенной степени реализации задач, определенных в решениях «Меры по дальнейшему улучшению деловой среды», а также в других нормативных правовых документах, относящихся к данной сфере.

Анализ и результаты: обоснование роли электроэнергетической отрасли в экономике Республики Узбекистан и необходимости ее развития; изучить значение, актуальность и правовые основы бухгалтерского учета на предприятиях электроснабжения; анализ перспектив использования зарубежного опыта бухгалтерского учета на предприятиях электроснабжения; совершенствование формирования учетной и налоговой политики в организациях электроснабжения;

совершенствование организации учета активов, частного капитала и обязательств предприятий электроснабжения;

внесение предложений по применению международных стандартов финансовой отчетности при учете субъектов электроснабжения;

совершенствование бухгалтерского учета на предприятиях электроснабжения.

«Рабочие таблицы трансформации» для составления отчетов о прибылях и убытках по характеру расходов с использованием данных финансовой отчетности и баланса в предприятиях электроснабжения;

0120 - Счет учета "Здания, сооружения и токопроводящее оборудование", для правильного формирования стоимости электроэнергии и других товаров предлагается открыть рабочие счета 0123 - "Провода электропередачи", 0124 - "Основы" и 0125 - "Изоляторы". и услуги;

0130 – «Машины и оборудование» в бухгалтерском учете, исходя из участия и характеристик основных средств в передаче электрической энергии, 0131 – «Силовые трансформаторы», 0132 – «Силовые машины и оборудование» и 0132 – «Приборы измерения и контроля». "предложили открыть счета;

Разработана система расчета стоимости различных отраслей передачи электроэнергии на основе «бесплатности потребителю» в субъектах электроснабжения.

С учетом особенностей отрасли на предприятиях электроснабжения внедрен план счетов бухгалтерского учета, основанный на международных стандартах финансовой отчетности;

исходя из вида и местонахождения основных средств, принято к практическому использованию предложение о присвоении каждому объекту (предмету) двенадцатизначного инвентарного номера;

реализовано предложение об учете задолженности за электроэнергию, приобретенную у хозяйствующих субъектов, производящих электроэнергию, на отдельном рабочем счете 6011 - «Задолженность перед субъектами хозяйствования за электроэнергию»;

В соответствии с международными стандартами разработана и принята к реализации формула создания резерва отпусков сотрудников перед их началом.

Использованные источники:

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Нуруллаев О.У.
старший преподаватель
кафедра "Электротехника"
Джизакский политехнический институт

РАЗРАБОТКА УЧЕБНОЙ ЛАБОРАТОРНОЙ УСТАНОВКИ ПО ИССЛЕДОВАНИЮ ОСЛАБЛЕНИЯ ЭЛЕКТРОМАГНИТНЫХ ПОЛЕЙ, ПРОЙДЕННЫХ ЧЕРЕЗ СТРОИТЕЛЬНЫЕ МАТЕРИАЛЫ

Аннотация. в статье рассмотрены электромагнитные поля (ЭМП), которые используются в качестве приема-передающего или управляющего каналов телекоммуникаций, разделенных по частоте, времени или коду с помощью различных радиотехнических устройств.

Ключевые слова: электромагнитные излучения (ЭМИ), электромагнитные поля (ЭМП), волновые процессы, радиотехническое устройство, антенные устройство, лабораторные установки, исследования процессов, структурная схема, электромагнитные поля.

Nurullaev O.U.
senior lecturer
Department of Electrical Engineering
Jizzakh Polytechnic Institute

DEVELOPMENT OF A TRAINING LABORATORY INSTALLATION FOR STUDYING THE ATTENUATION OF ELECTROMAGNETIC FIELDS PASSED THROUGH BUILDING MATERIALS

Abstract. the article considers electromagnetic fields (EMF), which are used as receiving, transmitting or controlling telecommunication channels separated by frequency, time or code using various radio engineering devices.

Keywords: electromagnetic radiation (EMR), electromagnetic fields (EMF), wave processes, radio engineering device, antenna device, laboratory installations, process studies, block diagram, electromagnetic fields.

Активное использование электромагнитного ресурса, связанное с развитием систем передачи и дистанционной обработки информации, теле- и радиовещания, мобильных систем связи, радиолокации и радионавигации привело к появлению дополнительного электромагнитного фона. Электромагнитные поля (ЭМП) используются в качестве приема-передающего или управляющего каналов телекоммуникаций, разделенных по частоте, времени или коду с помощью различных радиотехнических устройств, при этом они локализованы в пространстве с помощью антенных устройств.

Электромагнитные излучения (ЭМИ) радиочастотного диапазона, сформированные различными многочисленными радиоэлектронными средствами телекоммуникаций, отличаются от естественного электромагнитного фона частотными, модуляционными и мощностными характеристиками и вносят свой вклад в процесс воздействия на живые организмы, включая человека. Зачастую такое воздействие вызывает их отрицательную реакцию, проявляющуюся в ухудшении их биологических параметров. В связи с этим, очень актуальной становится задача изучения различных волновых процессов, возникающих при передаче информации посредством ЭМП в различных средах. Так, с практической точки зрения предлагается вариант разработки учебной лабораторной установки по исследованию ослабления электромагнитных полей, пройденных через строительные материалы.

Актуальность изучения и исследования в учебном процессе электромагнитных свойств современных материалов, используемых при строительстве зданий, обуславливается необходимостью учета воздействия ЭМИ на живые организмы, что весьма существенно и необходимо при планировании и проектировании беспроводных систем телекоммуникаций, т.е., по сути, учета фактора защиты человека от ЭМИ и обеспечения качественной связи. Способность материалов поглощать или рассеивать ЭМП определяется их электродинамическими свойствами, характеризующимися такими параметрами как относительные диэлектрическая и магнитная проницаемости и удельная проводимость, величины которых входят в расчетные выражения для описания процессов распространения ЭМП в рассматриваемых материалах.

Современные строительные материалы очень разнообразны по своим свойствам и выполняемым ими функциям. Городские здания строятся, исходя из архитектурных замыслов, а также из их назначения: жилые, общественные, офисные и т.п. При строительстве используются наряду с основными материалами (кирпич, бетон) разнообразные облицовочные материалы, несущие на себе функции звуко- и термоизоляции, защиты от солнечного излучения и осадков, а также декоративные функции. Теперь же, в эпоху массового развития беспроводных систем телекоммуникаций и их постоянного функционирования практически во всех местах работы и проживания людей, строительные материалы должны нести еще одну важную функцию – обеспечение электромагнитной безопасности.

Строительные материалы оказывают влияние на ЭМИ, ослабляя уровень сигнала, проходящего через них. Степень ослабления определяется электродинамическими параметрами материалов, а также параметрами и характеристиками радиоволн. Кроме прохождения, в зависимости от вида материалов, возможно отражение от них радиоволн, частичное или полное. Знание процессов, возникающих на границах различных материалов (или непосредственно в них), позволяет оценивать степень влияния ЭМИ на

человека и судить о его опасности. Для исследования ЭМП, проходящих через материалы, используемые в современном строительстве, предлагается лабораторная установка, структурная схема которой представлена на рисунке 1. Она позволяет проводить измерения уровня ослабления радиосигнала, проходящего через исследуемый материал. В состав установки входят УВЧ-генератор, передающая и приемная антенны логопериодического типа, аттенюатор, измерительный прибор и исследуемый материал, который размещается на пути распространения радиоволны от передающей антенны к приемной. Рабочий частотный диапазон измерений предлагается взять в пределах от 300 МГц до 3 ГГц, что соответствует части диапазона, используемой в настоящее время большинством беспроводных систем телекоммуникаций. В качестве исследуемых материалов могут быть выбраны следующие виды панелей:

- деревянная;
- стеклянная;
- гипсокартонная;
- композитная.

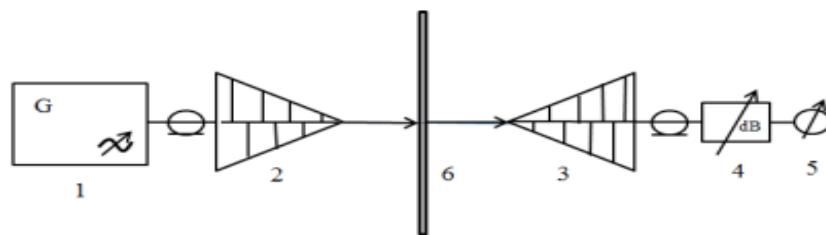


Рис.1. Структурная схема установки для исследования уровня ослабления радиосигнала, проходящего через материал:

1 –УВЧ-генератор, 2 – передающая антенна, 3 – приемная антенна,
4 – аттенюатор, 5 – измерительный прибор, 6 –исследуемый материал.

На лабораторной установке можно исследовать одновременно несколько материалов, представляющих собой композитные панели типа «сэндвич», для определения суммарной величины ослабления радиоволны. Примером таких материалов могут служить оконные рамы с двух- или трехслойными стеклопакетами. Исследования процессов прохождения радиоволн через различные материалы на данной установке сопряжены с некоторыми проблемами, которые необходимо решить для получения наиболее достоверных результатов. Они вызваны тем, что выбранный частотный диапазон исследований требует использования достаточно больших передающей и приемной антенн. Как было сказано, в данной установке используются логопериодические антенны, которые позволяют перекрыть диапазон 300...3000 МГц. Однако в активной зоне антенны, работающей на низкочастотной части диапазона, находятся довольно длинные вибраторы (длина одного плеча составляет 0,5 метра), а значит, размер всей антенны достаточно большой. Кроме того, расстояние между

антеннами должно быть не менее нескольких длин волн, т.е. на низких частотах исследований это расстояние должно быть не менее пяти метров. И, наконец, размеры панелей должны быть также достаточно большими, чтобы уменьшить дифракционные процессы, возникающие на их кромках.

В заключение хотелось бы отметить, что данная учебная лабораторная установка по исследованию ослабления электромагнитных полей, пройденных через строительные материалы, позволит рационально подойти к 90 планированию и оптимизации радиосетей, а также повысит интерес у студентов в изучении дисциплин, связанных с беспроводной связью.

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Нуруллаев О.У.
старший преподаватель
кафедра электротехники
Джизакский политехнический институт

ИСПОЛЬЗОВАНИЕ СОВРЕМЕННЫХ ТЕХНОЛОГИЙ ПРИ ИЗУЧЕНИИ РАДИОЭЛЕКТРОННОЙ ТЕХНИКИ

Аннотация. В статье рассмотрены вопросы по использованию современных технологий при изучении радиоэлектронной техники, том числе при исследовательских лабораторных работ, что дает обучающим достаточные навыки применения этих знаний на практике в будущей профессиональной деятельности.

Ключевые слова: высшие учебные заведения (ВУЗ), исследования, лаборатории, обучение, виртуальные лаборатории (ВЛ), исследования.

Nurullaev O.U.
senior lecturer
Department of Electrical Engineering
Jizzakh Polytechnic Institute

USE OF MODERN TECHNOLOGIES IN STUDYING RADIO- ELECTRONIC ENGINEERING

Abstract. The article discusses the issues of using modern technologies in the study of radioelectronic technology, including research laboratory work, which gives students sufficient skills to apply this knowledge in practice in future professional activities.

Keywords: higher education institutions (HEI), research, laboratories, training, virtual laboratories (VL), research.

Обострение проблемы подготовки в ВУЗах страны кадров высокой квалификации, наряду с ростом «наукоемкости» производства, обусловил как совершенствование «классических» форм обучения студентов, так и развитие дистанционных образовательных технологий. Предпочесть ту или иную форму обучения нельзя, так как каждая из них имеет не только свои достоинства, но и свои недостатки. С одной стороны, в «классических» формах обучения при увеличении количества обучаемых затруднительно обеспечить сохранение уровня (качества) проводимых исследований, особенно в случае использования студентами уникальных и дорогостоящих установок натурального моделирования. С другой стороны, хотя внедрение ДО и позволяет получить студентам возможность выбора содержания, времени, места и темпа обучения, но обладает таким недостатком как отсутствие

непосредственного «живого» общения «преподаватель-студент» в ходе изучения последним учебного материала.

Частично, проблему можно решить путем использования смешанного обучения, сочетанием методов электронного обучения и традиционного преподавания в аудитории в очном режиме. Так как «чисто электронное» обучение снижает объем и качество выполняемых студентами лабораторных исследований, то есть снижает долю «практической составляющей» их обучения, что, обязательно, сказывается на глубине знаний и твердости получаемых навыков. При этом возможно использование виртуальных или дистанционных лабораторий.

Виртуальные лаборатории (ВЛ) широко используются для автоматизации и управления различными техническими процессами в промышленности и в научных исследованиях. ВЛ выглядит как виртуальный прибор, имеющий лицевую панель с кнопками, переключателями и индикаторами. Изменяя положение тех или иных органов управления, обучаемый получает на индикаторах «реакцию» данной установки, которая соответствует действительности в той мере, в которой алгоритмы и модели, использованные в программе, точно описывают моделируемую установку. Обеспечивается возможность использования фронтальных методов проведения лабораторных исследований студентами даже при наличии всего 102 лишь одной дорогостоящей лабораторной установки, отслеживания в учебном процессе частой смены и постоянного развития аппаратных средств (исследуемых объектов), появления новых моделей и т.д. Однако возможности ВЛ ограничены проведением дистанционных экспериментов с программными симуляторами, что, конечно же, достаточно для ознакомления с принципами работы исследуемых приборов и некоторыми их особенностями, но в полной мере не обеспечивает приобретение практических комплексных навыков проектирования сложных приборов и систем в реальном масштабе времени.

Использование в учебном процессе дистанционной лаборатории (ДЛ) позволяет расширить перечень, объем и глубину проводимых исследований. ДЛ может представлять собой малоразмерную индустриальную систему, с помощью которой обучаемые могут изучать и близко знакомиться с реальными промышленными компонентами. При этом схема позволяет работать с ней как локально, так и дистанционно. Проблема расширения возможностей лабораторного практикума в рамках развития технологий ДО является одной из важнейших в связи с необходимостью получения обучаемыми не только качественных знаний в той или иной области, но и достаточных навыков применения этих знаний на практике в будущей профессиональной деятельности. Посредством использования в обучении виртуальных и дистанционных лабораторий

достигается круглосуточная автоматическая их работа, индивидуализация обучения и доступность лаборатории из любой географической точки.

Следует также отметить, что необходимо не только разделять «применимость» виртуальных и дистанционных лабораторий в зависимости от категории обучаемых, но и рассматривать эти лаборатории как сложные высокотехнологичные комплексы, включающие в себя как средства проведения экспериментальных исследований (виртуальные или дистанционно управляемые), так и соответствующее «обслуживающее» программное обеспечение, средства телекоммуникации и т.д.

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Омондуллаев Х.
магистратура талабаси
“ТИҚХММИ” Миллий тадқиқот университети
Қурбанов А.
ассистент
Жиззах политехника институти

ЭЛЕКТР ТАРМОҚЛАРИДА ҚУВВАТ ИСРОФЛАРНИ РЕАКТИВ ҚУВВАТНИ КОМПЕНСАЦИЯЛАШ ОРҚАЛИ КАМАЙТИРИШ

Аннотация. Ушбу мақолада электр тармоқларида қувват исрофларни реактив қувватни компенсациялаш орқали камайтириш масаласининг қўйилиши, уни ечиш усуллари ва оптимал реактив қувватни ҳисоблаш алгоритмлари келтирилган.

Kalit soʻzlar: электр энергия исрофи, реактив қувватни компенсациялаш, актив қувват исрофи, ташкилий техник тадбирлар.

Omondullaev Kh.
graduate student
"TIQXMMI" National Research University
Kurbanov A.
assistant
Jizzakh Polytechnic Institute

REDUCTION OF ENERGY WASTES IN ELECTRICAL NETWORKS THROUGH REACTIVE POWER COMPENSATION

Annotation. This article presents the problem of reducing power losses in electric networks by compensating reactive power, methods for solving it, and algorithms for calculating optimal reactive power.

Key words: electrical energy waste, reactive power compensation, active power waste, organizational technical measures.

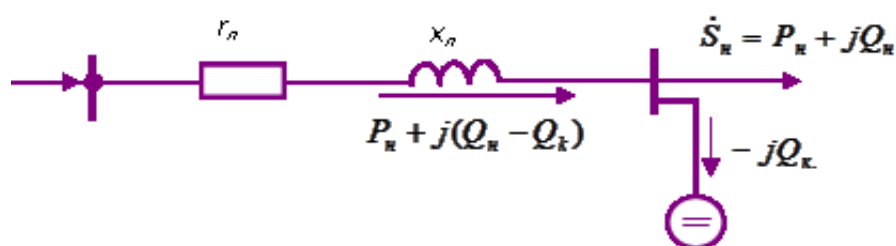
Электр энергия исрофини камайтириш учун кўплаб тадбирлар ишлаб чиқилган бўлиб, улардан энг оптималини танлаш масаласи мураккаб бўлганлиги учун уларни турларга ажратиш мақсадга мувофиқдир.

Бундай тадбирлар асосан уч гуруҳга бўлинади:

- ташкилий тадбирлар;
- техник тадбирлар;
- электр энергияни ҳисобий ва техник ҳисобга олиш тизимларини такомиллаштириш тадбирлари.

Ташкилий тадбирларни жорий қилиш ҳеч қандай қўшимча капитал харажатларни талаб этмайди [1-2].

Бошқа тадбирлар эса капитал харажатларни талаб этади [3].



Реактив қуввати компенсацияланмаган тармоқда қувват исрофи

$$\Delta P = \frac{P_n^2 + Q_n^2}{U_n^2} \cdot r_n$$

Реактив қуввати компенсацияланган тармоқда қувват исрофи [4]:

$$\Delta P = \frac{P_n^2 + (Q_n - Q_k)^2}{U_n^2} \cdot r_n$$

Юқорида келтирилган исроф формуласидан кўриниб турибдики, компенсацияловчи ускунанинг қуввати Q_{KV} қанча катта бўлса ($Q_{KV} < Q$ бўлган ҳолатда), қувват исрофи шунча кичик бўлади. Лекин, исрофни бу усулда камайтириш компенсацияловчи ускуналарга сарфланувчи қўшимча харажатларни талаб қилади. Бу харажатларни техник-иқтисодий ҳисоблашларда эътиборга олиш лозим.

Реактив қувватни компенсациялаш электр таъминоти самарадорлигини оширишнинг муҳим омили (воситаси) ҳисобланади. У фақат қувват исрофини камайтирибгина қолмай, электр энергия сифатини оширади ва электр тармоқлари ва электр станцияларининг юқини энгиллаштиради [5].

Реактив қувват манбаларига генераторлар, компенсаторлар, синхрон двигателлар, конденсаторлар ва бошқа статик ростловчи манбалар киради. Реактив қувватни ЭУЛ лари ҳам ишлаб чиқаради (110 кВ ва юқори кучланишларда аҳамиятга эга) [6].

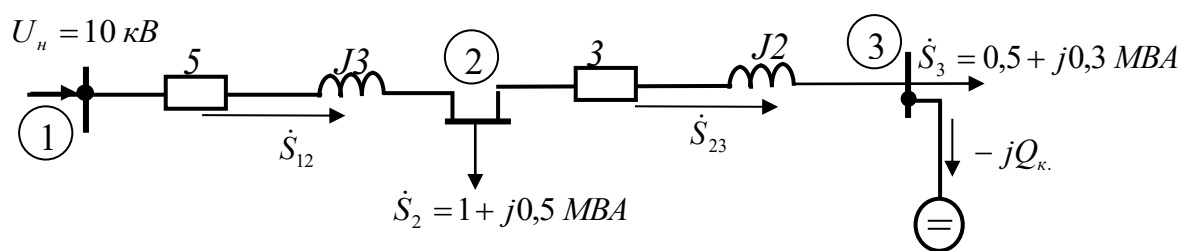
Генераторнинг актив ва реактив қувватлари орасидаги муносабат

$$S = \sqrt{P^2 + Q^2}$$

тенглик билан белгиланади.

Актив қувватнинг ортиши реактив қувватни камайишига олиб келади ва аксинча. Бироқ генераторларнинг актив қувватини камайтириш ҳисобига уни реактив қувват билан юклаш купгина ҳолатларда самарали эмас.

Схемаси 1-расмда келтирилган очиқ электр тармоқнинг чекка пунктидаги истеъмолчисида уланувчи реактив қувват компенсаторнинг тармоқдаги исрофнинг минимал бўлишини таъминловчи оптимал қувватини топиш талаб этилади [7].



1- расм

1-2 ва 2-3 шохобчалардаги қувватлар оқимларини 2- ва 3- тугунлар учун Кирхгофнинг биринчи қонунидан фойдаланиб ифодалаймиз [8]:

$$\dot{S}_{12} = 1,5 + j(0,8 - Q_k),$$

$$\dot{S}_{23} = 0,5 + j(0,3 - Q_k).$$

Электр тармоқдаги актив қувват исрофини компенсаторнинг номаълум қуввати орқали ифодалаймиз [9]:

$$\Delta P = \frac{P_{12}^2 + Q_{12}^2}{U_n^2} \cdot r_{12} + \frac{P_{23}^2 + Q_{23}^2}{U_n^2} \cdot r_{23} = \frac{1,5^2 + (0,8 - Q_k)^2}{10^2} \cdot 5 + \frac{0,5^2 + (0,3 - Q_k)^2}{10^2} \cdot 3.$$

Компенсаторнинг оптимал реактив қувватини актив қувват исрофи функцияси минимумлигининг зарурий шартидан фойдаланиб топамиз:

$$\frac{\partial \Delta P}{\partial Q_k} = -\frac{2(0,8 - Q_k)}{100} \cdot 5 - \frac{2(0,3 - Q_k)}{100} \cdot 3 = 0,$$

$$Q_{k, \text{opt.}} = \frac{0,08 + 0,018}{0,1 + 0,06} = 0,612 \text{ МВАР} = 612 \text{ кВАР}.$$

Реактив қувватни компенсациялашдан олинувчи самарани баҳолаш учун дастлабки ва компенсаторни улашдан кейинги ҳолатлардаги актив қувват исрофларини солиштирамиз.

Дастлабки тармоқ учун:

$$\Delta P = \frac{1,5^2 + 0,8^2}{10^2} \cdot 5 + \frac{0,5^2 + 0,3^2}{10^2} \cdot 3 = 0,155 \text{ МВт};$$

Реактив қуввати компенсацияланган тармоқ учун:

$$\Delta P_s = \frac{1,5^2 + (0,8 - 0,612)^2}{10^2} \cdot 5 + \frac{0,5^2 + (0,3 - 0,612)^2}{10^2} \cdot 3 = 0,117 \text{ МВт}.$$

Шундай қилиб, тармоқ охирида реактив қувватни оптимал компенсациялаш натижасида ундаги исроф

$\Delta \Delta P = \Delta P - \Delta P_s = 0,155 - 0,117 = 0,038 \text{ МВт} = 38 \text{ кВт}$ га, яъни 24,5% га камаяди.

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Орипов Х.Т.
преподаватель

*кафедра методики дошкольного, начального и специального
образования Наманганской области*

Национальный центр подготовки педагогов по новым методикам

ПЕДАГОГИЧЕСКИЕ УСЛОВИЯ РАЗВИТИЯ НАВЫКОВ КРИТИЧЕСКОГО МЫШЛЕНИЯ У УЧАЩИХСЯ НАЧАЛЬНЫХ КЛАССОВ

Аннотация. Критическое мышление – это жизненный навык, который позволяет учащимся анализировать информацию, мыслить независимо и принимать обоснованные решения в быстро меняющемся мире. Развитие навыков критического мышления у учащихся начальной школы важно для их подготовки к вызовам, с которыми они столкнутся в будущем. В этой статье мы исследуем педагогические условия, которые учителя могут создать для развития и развития навыков критического мышления у младших школьников.

Ключевые слова: начальная школа, критическое мышление, педагогическая технология, умственное развитие.

Oripov Kh.T.
teacher

*Department of Methods of Preschool, Primary and Special Education of
Namangan Region*

National Center for Teacher Training in New Methods

PEDAGOGICAL CONDITIONS FOR THE DEVELOPMENT OF CRITICAL THINKING SKILLS IN PRIMARY CLASS STUDENTS

Abstract. Critical thinking is a life skill that enables students to analyze information, think independently, and make informed decisions in a rapidly changing world. Developing critical thinking skills in elementary school students is important to prepare them for the challenges they will face in the future. In this article, we explore pedagogical settings that teachers can create to nurture and enhance critical thinking skills in young students.

Key words: elementary school, critical thinking, pedagogical technology, mental development.

ВВЕДЕНИЕ

Одним из главных педагогических условий развития критического мышления у младших школьников является развитие культуры исследовательской деятельности и любознательности. Учителя должны

поощрять учащихся задавать вопросы, изучать различные точки зрения и рассматривать альтернативные точки зрения. Создавая в классе среду, в которой ценится любопытство и поощряется обучение, основанное на запросах, учащиеся могут развить привычку критически анализировать информацию и стремиться к более глубокому пониманию, чтобы дать возможность. Учителя могут разрабатывать задачи и проекты, которые требуют от учащихся критического мышления, оценки фактических данных и нахождения творческих решений. Занимаясь практическими упражнениями, студенты развивают навыки аналитического мышления и учатся логически мыслить в жизненных ситуациях.

МАТЕРИАЛЫ И МЕТОДЫ

Метапознание играет решающую роль в развитии навыков критического мышления. Учителя должны обучать учащихся метакогнитивным стратегиям, таким как размышление, самооценка и постановка целей. Помогая учащимся осознать свои мыслительные процессы и направляя их в разработке стратегий мониторинга и оценки собственного обучения, учителя помогают учащимся стать активными и независимыми учениками, которые могут критически мыслить о своих собственных мыслительных процессах. Совместное обучение может быть эффективным педагогическим условием для них совершенствование навыков критического мышления у учащихся начальных классов. Участвуя в групповых занятиях и дискуссиях, учащиеся могут обмениваться идеями, бросать вызов мышлению друг друга и учиться с разных точек зрения. Совместное обучение побуждает учащихся рассматривать разные точки зрения, эффективно общаться и работать вместе для анализа информации и решения проблем. В современную цифровую эпоху обучение информационной грамотности имеет решающее значение для развития навыков критического мышления.

Учителя должны научить учащихся оценивать достоверность источников, выявлять предвзятость и отличать факт от мнения. Предоставляя учащимся навыки, необходимые для критического анализа и интерпретации информации, учителя помогают учащимся стать информированными и сообразительными потребителями. Предоставляя учащимся возможность использовать свои навыки критического мышления для решения реальных проблем и принятия обоснованных решений, учителя помогают учащимся понять ценность и важность критического мышления в их повседневной жизни. Критическое мышление в начальной школе. Для их подготовки необходимо развивать навыки. для успеха в современном мире. Учителя позволяют учащимся критически мыслить, эффективно анализировать информацию и принимать обоснованные решения, создавая педагогическую среду, которая способствует вопросам и ответам, решению проблем, метапознанию, сотрудничеству, информационной грамотности и связям с реальным миром. Реализуя эти

педагогические стратегии, учителя помогают ученикам стать уверенными в себе, независимыми и критически мыслящими людьми, готовыми противостоять вызовам будущего.[4]

РЕЗУЛЬТАТЫ И ОБСУЖДЕНИЯ.

Развитие навыков критического мышления у учащихся начальных классов важно для формирования самостоятельного и аналитического мышления, навыков решения проблем и принятия решений. Для создания педагогических условий, способствующих развитию критического мышления у младших школьников, преподаватели могут реализовать следующие стратегии:

Поощряйте учащихся задавать вопросы, исследовать различные точки зрения и оспаривать предположения. Создайте в классе культуру, которая ценит любознательность и способствует обучению на основе запросов.[4]

Предоставляйте учащимся возможности участвовать в практической деятельности, которая требует критического и творческого мышления для решения сложных проблем, работы над открытыми заданиями и поиска решений.[2]

Научите студентов метакогнитивным стратегиям, таким как размышление, самооценка и постановка целей. Помогите им осознать свои мыслительные процессы и помогите им разработать стратегии мониторинга и оценки их обучения.

Поощряйте совместную учебную деятельность, в ходе которой учащиеся вместе решают проблемы, обсуждают идеи и делятся точками зрения. Совместное обучение помогает учащимся рассматривать разные точки зрения и учиться на опыте друг друга.

Помогите учащимся развить навыки критической оценки и анализа информации. Научите их оценивать достоверность источников, выявлять предвзятость и отличать факт от мнения.

Включите сократовские методы исследования в свою преподавательскую практику, чтобы стимулировать критическое мышление. Поощряйте учащихся глубоко задуматься о проблемах, рассмотреть различные точки зрения и обосновать свое мнение.

Предоставьте учащимся возможность вести содержательные дискуссии на различные темы. Поощряйте их выражать свое мнение, прислушиваться к точкам зрения других и приводить аргументированные аргументы, основанные на доказательствах.[3]

Свяжите обучение с реальными контекстами и сценариями, чтобы помочь учащимся увидеть актуальность своего обучения. Поощряйте их использовать навыки критического мышления для решения реальных проблем и принятия обоснованных решений.[1]

РЕЗЮМЕ:

Создавая благоприятную среду обучения, в которой ценятся практики критического мышления, исследования, сотрудничества и размышления,

учителя помогают ученикам начальной школы критически мыслить, эффективно анализировать информацию и принимать обоснованные решения в сложном и разнообразном мире, что может способствовать развитию важных вещей навыка, необходимые для поступления.

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Пи Цзычэнь
студент магистратуры
Московский педагогический государственный университет

ОТРАСЛЕВЫЕ И НАЦИОНАЛЬНЫЕ ОСОБЕННОСТИ АУТСОРСИНГА В АВТОМОБИЛЬНОЙ ПРОМЫШЛЕННОСТИ КНР

Аннотация. Статья посвящена анализу отраслевых и национальных особенностей аутсорсинга в автомобильной промышленности Китая (КНР). В ней рассматриваются развитие автомобильной промышленности КНР, различные схемы аутсорсинга, функции и задачи аутсорсинга, а также его влияние на глобальные цепочки поставок. Статья подчёркивает важность аутсорсинга для повышения эффективности, снижения издержек и улучшения качества продукции, а также выявляет риски, связанные с высокой степенью зависимости от внешних поставщиков.

Ключевые слова: аутсорсинг, автомобильная промышленность, КНР, глобальные цепочки поставок, специализация, информационные технологии, государственная поддержка, стандарты качества.

Pi Zichen
graduate student
Moscow Pedagogical State University

INDUSTRY AND NATIONAL FEATURES OF OUTSOURCING IN THE AUTOMOTIVE INDUSTRY OF THE PRC

Abstract. The article analyzes the industry-specific and national characteristics of outsourcing in the automotive industry of China (PRC). It examines the development of the automotive industry in China, various outsourcing schemes, functions, and tasks of outsourcing, as well as its impact on global supply chains. The article highlights the importance of outsourcing in increasing efficiency, reducing costs, and improving product quality, while also identifying risks associated with high dependency on external suppliers.

Keywords: outsourcing, automotive industry, PRC, global supply chains, specialization, information technology, government support, quality standards.

Автомобильная промышленность Китая (КНР) является одной из самых крупных и динамично развивающихся отраслей в мире. За последние несколько десятилетий Китай превратился из страны с ограниченными возможностями производства автомобилей в одного из ведущих производителей и экспортеров автомобилей и автокомпонентов. Важную роль в этом процессе сыграл аутсорсинг, который позволил компаниям

сосредоточиться на своих ключевых компетенциях, повысить эффективность и снизить издержки. В данной статье рассматриваются отраслевые и национальные особенности аутсорсинга в автомобильной промышленности КНР, а также влияние этих процессов на глобальные цепочки поставок.

Автомобильная промышленность КНР прошла долгий путь от скромных начинаний до сегодняшнего мирового лидерства. В 1950-х годах Китай начал производить автомобили в небольших объемах, в основном для внутреннего потребления. В 1980-х годах правительство КНР начало привлекать иностранных инвесторов, предоставляя им выгодные условия для создания совместных предприятий с местными компаниями. Это позволило китайским производителям получить доступ к передовым технологиям и управленческому опыту.

С начала 2000-х годов автомобильная промышленность Китая начала стремительно расти, что было обусловлено экономическим подъемом, урбанизацией и ростом уровня доходов населения. Сегодня Китай является крупнейшим производителем и рынком автомобилей в мире, а его автомобильная промышленность занимает ключевое место в глобальных цепочках поставок.

Аутсорсинг является важным инструментом для повышения эффективности и конкурентоспособности автомобильной промышленности. Он включает передачу различных функций и процессов внешним компаниям, что позволяет основным производителям сосредоточиться на своих ключевых компетенциях. В автомобильной промышленности аутсорсинг охватывает широкий спектр услуг и процессов, включая производство автокомпонентов, проектирование, логистику, информационные технологии и управление цепочками поставок.

В КНР аутсорсинг в автомобильной промышленности получил широкое распространение, что связано с несколькими факторами. Во-первых, китайский рынок предлагает широкий выбор поставщиков и подрядчиков, способных обеспечить высокое качество продукции и услуг по конкурентоспособным ценам. Во-вторых, развитая инфраструктура и логистическая сеть позволяют эффективно управлять цепочками поставок и минимизировать издержки. В-третьих, государственная поддержка и стимулы для развития высокотехнологичных производств способствуют привлечению инвестиций и развитию аутсорсинговых компаний.

Одной из ключевых отраслевых особенностей аутсорсинга в автомобильной промышленности КНР является высокая степень специализации. Китайские компании активно используют аутсорсинг для производства автокомпонентов, что позволяет им сосредоточиться на сборке и продаже готовых автомобилей. В результате в Китае сформировалась развитая сеть поставщиков, специализирующихся на

производстве различных компонентов, таких как двигатели, трансмиссии, электронные системы, кузовные детали и прочие.

Эта высокая степень специализации позволяет китайским компаниям достигать значительной экономии за счет масштабов производства. Крупные производители, такие как Geely, BYD и Great Wall Motors, активно сотрудничают с многочисленными поставщиками, что позволяет им снижать издержки и повышать качество продукции. В то же время, это создает определенные риски, связанные с зависимостью от внешних поставщиков и возможными сбоями в цепочках поставок.

Еще одной особенностью является активное использование информационных технологий для управления цепочками поставок и оптимизации производственных процессов. Китайские компании внедряют передовые решения в области автоматизации и цифровизации, что позволяет им оперативно реагировать на изменения спроса и эффективно управлять запасами. Такие технологии, как интернет вещей (IoT), искусственный интеллект (AI) и блокчейн, становятся неотъемлемой частью современных производственных процессов в КНР.

Национальные особенности аутсорсинга в автомобильной промышленности КНР включают несколько важных аспектов. Во-первых, государственная политика играет ключевую роль в развитии аутсорсинга и автомобильной промышленности в целом. Правительство КНР активно поддерживает развитие высокотехнологичных отраслей, предоставляя различные льготы и стимулы для инвесторов и предпринимателей. Это создает благоприятные условия для развития аутсорсинговых компаний и привлечения иностранных инвестиций.

Во-вторых, культурные особенности и деловая практика в Китае оказывают значительное влияние на процессы аутсорсинга. В китайской деловой культуре большое значение придается личным отношениям и доверию между партнерами. Это означает, что успешное сотрудничество в области аутсорсинга требует налаживания прочных деловых связей и долгосрочных партнерств. Китайские компании стремятся к установлению доверительных отношений с иностранными партнерами, что способствует устойчивому развитию аутсорсинговых процессов.

В-третьих, особое внимание уделяется вопросам качества и безопасности продукции. Китайское правительство устанавливает строгие стандарты и нормативные требования для автомобильной промышленности, что стимулирует компании к повышению качества продукции и соблюдению международных стандартов. Это, в свою очередь, требует от аутсорсинговых компаний соответствия высоким требованиям и постоянного улучшения производственных процессов.

Аутсорсинг в автомобильной промышленности КНР оказывает значительное влияние на глобальные цепочки поставок. Китай является крупнейшим поставщиком автокомпонентов и готовых автомобилей для

мирового рынка, что делает его ключевым звеном в международных цепочках поставок. Развитие аутсорсинга в КНР способствует повышению эффективности и конкурентоспособности глобальной автомобильной промышленности, что позволяет снижать издержки и улучшать качество продукции.

Однако, высокая степень зависимости от китайских поставщиков также создает определенные риски для глобальных цепочек поставок. Возможные сбои в производстве и логистике в КНР могут оказать значительное влияние на мировой рынок автомобилей. Пандемия COVID-19 показала уязвимость глобальных цепочек поставок и необходимость диверсификации поставщиков и производственных мощностей.

Аутсорсинг является важным инструментом для повышения эффективности и конкурентоспособности автомобильной промышленности КНР. Отраслевые и национальные особенности аутсорсинга в Китае включают высокую степень специализации, активное использование информационных технологий, государственную поддержку, культурные особенности и строгие стандарты качества. Эти факторы способствуют развитию автомобильной промышленности и укреплению позиций Китая в глобальных цепочках поставок.

Тем не менее, высокая степень зависимости от китайских поставщиков создает определенные риски для мировой автомобильной промышленности. Для минимизации этих рисков необходимо диверсифицировать поставщиков и производственные мощности, а также продолжать инвестировать в развитие передовых технологий и улучшение качества продукции. Таким образом, аутсорсинг в автомобильной промышленности КНР будет продолжать играть важную роль в формировании глобальных цепочек поставок и обеспечении устойчивого развития мировой экономики.

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Пи Цзычэнь
студент магистратуры
Московский педагогический государственный университет

АУТСОРСИНГ В ДЕЯТЕЛЬНОСТИ МЕЖДУНАРОДНОЙ КОМПАНИИ: СХЕМЫ, ФУНКЦИИ И ЗАДАЧИ

Аннотация. Статья исследует роль аутсорсинга в деятельности международных компаний, рассматривая различные схемы, функции и задачи аутсорсинга. Она акцентирует внимание на стратегических преимуществах, связанных с аутсорсингом, таких как снижение затрат, повышение гибкости и улучшение качества бизнес-процессов. Также обсуждаются риски и вызовы, связанные с аутсорсингом, и подчеркивается важность эффективного управления аутсорсинговыми проектами для достижения устойчивого роста и конкурентоспособности на глобальном рынке.

Ключевые слова: аутсорсинг, международные компании, бизнес-процессы, снижение затрат, стратегические преимущества, управление рисками, глобальный рынок, инновации.

Pi Zichen
graduate student
Moscow Pedagogical State University

OUTSOURCING IN THE ACTIVITIES OF AN INTERNATIONAL COMPANY: SCHEMES, FUNCTIONS AND TASKS

Abstract. The article explores the role of outsourcing in the activities of international companies, examining various schemes, functions, and tasks of outsourcing. It emphasizes the strategic advantages associated with outsourcing, such as cost reduction, increased flexibility, and improved quality of business processes. The article also discusses the risks and challenges of outsourcing, highlighting the importance of effective management of outsourcing projects to achieve sustainable growth and competitiveness in the global market.

Keywords: outsourcing, international companies, business processes, cost reduction, strategic advantages, risk management, global market, innovation.

Аутсорсинг играет критическую роль в деятельности международных компаний, позволяя им фокусироваться на своих ключевых компетенциях, снижать издержки и повышать эффективность. В условиях глобализации и усиленной конкуренции, эффективное использование аутсорсинга становится важным стратегическим инструментом для обеспечения устойчивого роста и конкурентных преимуществ. В данной статье будут

рассмотрены схемы, функции и задачи аутсорсинга в деятельности международных компаний, а также его влияние на их общую эффективность и успех на мировом рынке.

Аутсорсинг может принимать различные формы и схемы в зависимости от потребностей и стратегий международных компаний. Одна из самых распространенных схем аутсорсинга — это передача отдельных бизнес-процессов или функций внешним подрядчикам. Этот подход позволяет компаниям сосредоточиться на своих основных видах деятельности, таких как разработка новых продуктов, маркетинг и продажи, оставляя менее критические процессы профессионалам из других организаций.

Еще одной популярной схемой является использование офшорного аутсорсинга, при котором функции или процессы передаются компаниям, расположенным в других странах. Это позволяет существенно снизить затраты на рабочую силу и другие ресурсы. Например, многие международные компании передают ИТ-поддержку и разработку программного обеспечения специалистам из Индии или Филиппин, где квалифицированные кадры предлагают свои услуги по более низким ценам.

Помимо этого, существует схема аутсорсинга, известная как аутсорсинг бизнес-процессов (BPO), которая охватывает широкий спектр операций, таких как бухгалтерский учет, кадровое администрирование, управление цепочками поставок и клиентская поддержка. В рамках этой схемы компании могут передавать целые функциональные направления специализированным аутсорсинговым провайдерам, которые обладают необходимыми знаниями и технологиями для эффективного выполнения этих задач.

Аутсорсинг выполняет множество функций в деятельности международных компаний, играя важную роль в оптимизации их бизнес-процессов и повышении общей эффективности. Одной из ключевых функций аутсорсинга является снижение затрат. Путем передачи отдельных функций или процессов внешним подрядчикам, компании могут существенно сократить операционные издержки, избегая необходимости инвестировать в дорогостоящее оборудование и инфраструктуру.

Еще одной важной функцией аутсорсинга является повышение гибкости и адаптивности бизнеса. В условиях динамичного рынка и быстро меняющихся потребностей клиентов, компании должны быть готовы оперативно реагировать на изменения. Аутсорсинг позволяет международным компаниям быстрее адаптироваться к новым условиям и требованиям, предоставляя доступ к специализированным ресурсам и экспертизе внешних подрядчиков.

Кроме того, аутсорсинг способствует повышению качества и эффективности бизнес-процессов. Специализированные аутсорсинговые компании обладают глубокой экспертизой и передовыми технологиями в

своих областях, что позволяет им выполнять задачи с высокой степенью точности и профессионализма. Это особенно важно для международных компаний, которые стремятся поддерживать высокие стандарты качества и соответствовать требованиям глобальных рынков.

Задачи аутсорсинга в деятельности международных компаний включают несколько ключевых аспектов. Одной из главных задач является обеспечение стратегического преимущества на рынке. Путем передачи отдельных функций или процессов внешним подрядчикам, компании могут сосредоточиться на своих ключевых компетенциях и стратегических инициативах, что позволяет им занимать лидирующие позиции в своих отраслях.

Еще одной важной задачей является управление рисками и обеспечение устойчивости бизнеса. Аутсорсинг позволяет компаниям диверсифицировать свои ресурсы и снизить зависимость от внутренних ресурсов и процессов. Это особенно важно в условиях глобальной нестабильности и неопределенности, когда компании сталкиваются с различными рисками, такими как экономические кризисы, политическая нестабильность или природные катастрофы.

Кроме того, аутсорсинг способствует инновациям и развитию новых технологий. Международные компании могут сотрудничать с внешними провайдерами, которые обладают передовыми технологиями и экспертизой в области исследований и разработок. Это позволяет компаниям внедрять инновационные решения и повышать свою конкурентоспособность на глобальном рынке.

Аутсорсинг оказывает значительное влияние на деятельность международных компаний, изменяя их бизнес-модели и подходы к управлению. Одним из ключевых преимуществ аутсорсинга является возможность концентрироваться на стратегических инициативах и инновациях. Путем передачи рутинных и менее критичных функций внешним подрядчикам, компании могут сосредоточиться на разработке новых продуктов, расширении рынков сбыта и укреплении своих позиций на глобальном рынке.

Кроме того, аутсорсинг способствует улучшению операционной эффективности и снижению издержек. Профессиональные аутсорсинговые компании обладают значительным опытом и передовыми технологиями, что позволяет им выполнять задачи более эффективно и с меньшими затратами. Это особенно важно для международных компаний, которые стремятся оптимизировать свои бизнес-процессы и поддерживать конкурентные преимущества в условиях жесткой конкуренции.

Однако, аутсорсинг также сопряжен с определенными рисками и вызовами. Одним из основных рисков является потеря контроля над ключевыми бизнес-процессами и конфиденциальной информацией. Компании должны тщательно выбирать аутсорсинговых партнеров и

устанавливать четкие условия сотрудничества, чтобы минимизировать эти риски и обеспечить защиту своих интересов.

Еще одним вызовом является необходимость эффективного управления аутсорсинговыми проектами и координации действий между различными подразделениями и партнерами. Международные компании должны разрабатывать и внедрять эффективные системы управления и коммуникации, чтобы обеспечивать успешное выполнение аутсорсинговых проектов и достигать поставленных целей.

Аутсорсинг является важным стратегическим инструментом в деятельности международных компаний, позволяя им повышать эффективность, снижать издержки и концентрироваться на своих ключевых компетенциях. Схемы, функции и задачи аутсорсинга разнообразны и зависят от конкретных потребностей и стратегий компаний. В условиях глобализации и усиленной конкуренции, эффективное использование аутсорсинга становится необходимым условием для достижения устойчивого роста и конкурентных преимуществ.

Аутсорсинг позволяет международным компаниям достигать высокой степени гибкости и адаптивности, управлять рисками и внедрять инновационные решения. Однако, для успешного использования аутсорсинга, компании должны учитывать возможные риски и вызовы, разрабатывать четкие стратегии и устанавливать эффективные системы управления. Таким образом, аутсорсинг будет продолжать играть ключевую роль в деятельности международных компаний, способствуя их успеху на глобальном рынке и обеспечивая устойчивое развитие в долгосрочной перспективе.

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*Платонова Е.Д., д.э.н.
заведующий кафедрой экономической теории и менеджмента
Московский педагогический государственный университет
РФ, г.Москва
Ли Хао
студент магистратуры
Московский педагогический государственный университет
КНР, г.Москва*

РОЛЬ МЕЖДУНАРОДНОЙ АССОЦИАЦИИ “INTERNATIONAL FACTORS GROUP” В РАЗВИТИИ ФАКТОРИНГА В МИРОВОЙ ЭКОНОМИКЕ

Аннотация. В данной статье рассматривается вклад международной ассоциации «International Factors Group» в развитие факторинговых услуг в мировом масштабе. Авторами описаны основные аспекты интеграции ассоциаций, необходимые для расширения возможностей для компаний в области финансирования торговли в условиях неопределенности и турбулентности мировой экономики.

Ключевые слова: International Factors Group, факторинг, международная торговля, финансирование, экспорт, импорт.

*Platonova E.D., doctor of economics
Head of the Department of Economics theory and management
Moscow Pedagogical State University
RF, Moscow
Li Hao
master's student
Moscow Pedagogical State University
China, Moscow*

THE ROLE OF THE INTERNATIONAL ASSOCIATION “INTERNATIONAL FACTORS GROUP” IN THE DEVELOPMENT OF FACTORING IN THE WORLD ECONOMY

Abstract. This article examines the contribution of the international association «International Factors Group» to the development of factoring services on a global scale. The main aspects of association integration necessary to expand opportunities for companies in the field of trade finance in conditions of uncertainty and turbulence in the global economy are described by Authors.

Key words: International Factors Group, factoring, international trade, financing, export, import.

«Factors Chain International» (FCI) была основана в 1968 году как некоммерческая глобальная ассоциация. FCI является организацией, открытой для любой компании, предоставляющей факторинговые услуги или планирующей организовать факторинговую деятельность, а также для поставщиков услуг в отрасли²⁰⁵. Когда возник FCI, внутренний факторинг был доступен только в Северной Америке и только в нескольких европейских странах. Мировой товарный экспорт составлял менее 500 миллиардов долларов США в год, а в США объемы факторинга практически отсутствовали. В этот критический период 1960-х годов прошлого века в Европе были заложены основы создания глобальной факторинговой индустрии.

Первый этап развития FCI был направлен на создание надлежащей правовой инфраструктуры и продвижение отрасли. Концепция трансграничного факторинга все еще была новой и ограничивалась отсутствием географического охвата. Признавая потенциал международного факторинга, члены-основатели FCI осознали, что необходима некоммерческая ассоциация и отраслевой орган, во-первых, для внедрения факторинга в странах, где он еще не доступен, и, во-вторых, для разработки структуры международного факторинга, которая позволила бы факторинговым компаниям в стране экспортера и импортера тесно сотрудничать.

Вторая фаза роста FCI началась в середине 1970-х годов прошлого века и связан с именем Йеруна Конштамма, который был назначен генеральным секретарем в 1972 году и начал продвигать факторинг, распространяя его идеи по всему миру, в том числе в Восточной Азии, Латинской Америке, Восточной Европе и на двух крупнейших и наиболее густонаселенных рынках — Китае и Индии. Объем за этот период с 1972 по 1997 год вырос с менее чем 10 млрд Евро до примерно 600 млрд евро к 1997 году.

На втором этапе число членство FCI выросло с 25 до более, чем 140 членов, работающих в более чем 40 странах всего за 25-летний период.

Организация самостоятельно разработала Кодекс международного факторинга и систему ФАСТ, систему обмена телексными сообщениями до Интернета, предназначенную для поддержки роста трансграничного факторинга между членами. Кроме того, FCI начала разработку надежной образовательной платформы, которая помогла обучить тысячи студентов факторингу и финансированию дебиторской задолженности.

²⁰⁵ About us.URL: <https://fci.nl/en/about-fci>

Третья фаза развития организации началась с «азиатского гриппа», то есть с финансового кризиса, который начался в Юго-Восточной Азии, но быстро распространился и на другие страны мира. В то время на долю Азии приходилось менее 3% мировых объемов факторинга.

Начало нового тысячелетия также стало важным поворотным моментом для FCI. Период конца 1990-х годов прошлого века известен как начало революции в глобальной торговле открытыми счетами и подъема развивающихся рынков во главе с доминирующим Китаем. К 1997 году FCI насчитывала около 140 членов, но к 2017 году FCI увеличится почти до 400 членов. Объем этой отрасли составил около 600 миллиардов евро. Феноменальный рост факторинга был вызван 1) быстрым расширением бизнеса в Азии во главе с Китаем; 2) значительным ростом трансграничного факторинга (с менее 5% от общего объема в 1997 г. до более 22% в 2017 г.) и 3) быстрым расширением факторинга в Европе, вызванное переходом бизнеса от банков к преимущественно факторинговые дочерние банки. Частично это произошло из-за глобальной рецессии 2008-2009 годов, которая привела к переходу к более безопасным и надежным формам финансирования, включая благоприятный режим капитала, который BASEL предоставил коммерческим банкам, инвестирующим в финансирование дебиторской задолженности и факторинговые услуги.

Четвертый этап – это тот, на котором находится в настоящее время. В результате фантастического роста отрасли за последние два десятилетия были заложены семена для объединения двух крупнейших мировых факторинговых ассоциаций. В 2016 году две ключевые факторинговые ассоциации «Factors Chain International» (FCI) и «International Factors Group» (IFG) объединили свои знания и усилия, сформировав крупнейшее мировое объединение факторинговых компаний. В результате появилась ассоциация FCI, в которую в данный момент входят более 400 членов, охватив более, чем 90 стран мира. Транзакции участников составляют в среднем 50% мирового объема корреспондентского факторинга в мире²⁰⁶.

Альянс из этих двух ассоциаций сформировал площадку для развития факторинговых операций, позволяющая участникам взаимодействовать в мировом масштабе, давая возможность использовать широкий спектр услуг. В дополнение к этому, была создана особая программа предоставления факторинговых услуг для промышленности, а также улучшено взаимодействие с банковской комиссией Международной торговой палаты, Всемирной торговой организацией, налажена коммуникация с банками развития различных стран. Ассоциация включили в свою работу новые операции, начав оказывать услуги обратного факторинга для своих членов, которые заинтересованы в развитии операций международной торговли. Организованный FCI, он объединяет 15 национальных и 1 международную

206 Facilitating Factoring and Receivables Finance. URL: <https://fci.nl/en/about-fci>

отраслевые ассоциации, действующие в ЕС. Ее члены представляют более 200 факторинговых компаний Европы.

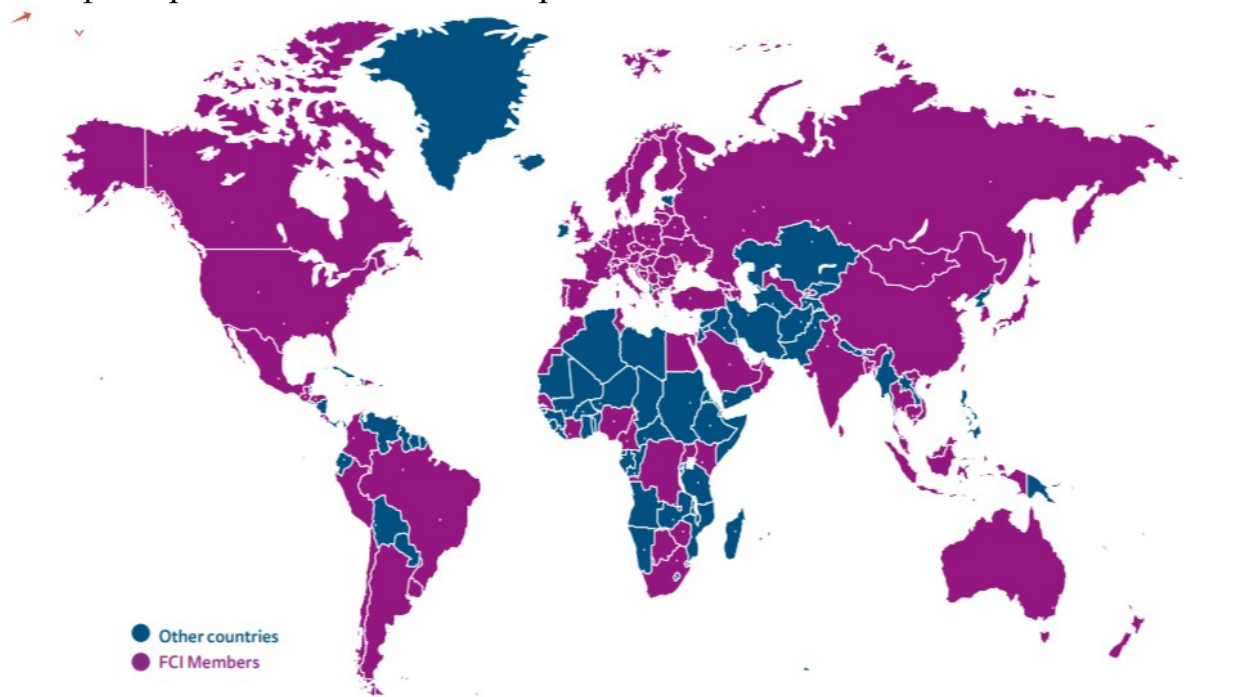


Рисунок 1 – Территория стран-членов FCI

Индустрия факторинга и коммерческого финансирования играет ценную роль в экономике ЕС, и ассоциация работает над тем, чтобы участвовать в дебатах с регулируемыми органами и законодателями, чтобы убедиться, что они полностью осведомлены о преимуществах, которые может предложить эта отрасль.

Ассоциация стремится взаимодействовать с европейским правительством и законодателями для повышения доступности финансирования для бизнеса, уделяя особое внимание сообществу малого и среднего бизнеса. Чтобы показать свою полезность для малого и среднего бизнеса, созданное объединение выделяет ресурсы для продвижения своих услуг в развивающихся странах, указывая на свои многочисленные преимущества.

К ним относятся:

Для продавца

- Улучшение оборотного капитала.
- Получите доступ к финансированию на лучших условиях, повышая кредитоспособность покупателя.
- Сокращение трудоемкого администрирования кредита и затрат.
- Расширение оборота за счет гибких условий оплаты.
- Увеличение доходов за счет улучшения DSO.
- 100% кредитная защита от безнадежных долгов и неплатежеспособности клиентов.

- Лучший потенциал заимствования и возможность воспользоваться скидками поставщиков.

Для покупателя

- Улучшение оборотного капитала за счет более позднего погашения кредиторской задолженности.

- Возможность покупать товары на удобных условиях открытия счета.

- Расширение покупательной способности без использования существующих кредитных линий.

Для преодоления возникающих сложностей, международные ассоциации факторинговых компаний стремятся к объединению. FCI+ работает над сотрудничеством с международными организациями, такими, как Международная торговая палата (разработка универсальных правил факторинга), Европейский банк реконструкции и развития (ЕБРР), Межамериканская инвестиционная корпорация (МКК) и другие. Ассоциация укрепила свое присутствие на международной арене, акцентируя внимание на растущих экономиках. FCI+ систематически организует семинары по факторингу в регионах, например, они проходили в Улан-Баторе (Монголии) и в Пекине (Китае). Созданная ассоциация представлена филиалами в Латинской Америке и Азии.

Вследствие возрастающего мирового товарооборота увеличивается спрос на факторинговые услуги, несмотря на то, что это может быть сопряжено с потенциальными рисками, возникающими в этом сегменте мировой экономики. При оценке будущего рынка факторинговых услуг можно вспомнить фразу Нильса Бора: «Предсказания делать очень трудно, особенно о будущем»²⁰⁷. Эта цитата приводится в исследованиях о возможности прогнозирования в условиях роста нестабильности и непредсказуемости экономического развития. Так, прекрасный пятилетний бизнес-план популярного банка Lehman Brothers был принят в июне 2008 г. - всего за 3 месяца возникновения мирового финансового кризиса – «азиатского гриппа» в мировой экономике. Однако ему не суждено было сбыться, а сам банк потерпел финансовый крах.

Безусловно, следует учитывать этот опыт при составлении прогнозов развития компаний. Принимая во внимание изменчивость в мировой экономике, некоторые последние события внесли дополнительную неизвестность в прогнозирование. Даже вне этих событий из-за снижения мировых темпов экономического роста сложность прогнозов усугубляется, в том числе, в связи с динамичными факторами: замедление экономики Китая; нестабильная экономическая обстановка в некоторых развитых странах, волатильность европейских банков, санкционная война коллективного Запада с Россией и Китаем и другие мировые вызовы.

207 Цит. По Орлова Г., Тарановская Е. Факторинговые операции в мировой экономике// Российский внешнеэкономический вестник. 2017. № 3. С.84

В результате этого, с учетом оценок Всемирного банка, МВФ и ОЭСР стоит отметить, что возникла тенденция неуверенного развития мировой экономики на ближайшее будущее, с учетом потенциального умеренного роста экономики в развитых странах и замедленного роста в странах третьего мира. Вместе с тем, по прогнозу МВФ, российская экономика в 2024 году вырастет на 3,2%, что полностью соответствует прогнозу роста по всему миру²⁰⁸.

Актуальность факторинговых услуг продолжает возрастать на фоне экономической неопределенности и прогнозируемого более, чем умеренного роста в различных экономиках мира. Российские финансовые институты проявляют повышенный интерес к международному факторингу, видя в нем перспективное направление для расширения коммерческой деятельности в условиях санкционного давления. И, конечно, факторинг особо важен в международных организациях, занимающихся торговлей.

Несмотря на санкции, можно отметить значительный объем операций внешней торговли в экономике России. Особенно в связи с «разворотом на Восток»: в 2023 году торговый оборот России и Китая увеличился на 26,3%, до 240,11 млрд дол. США²⁰⁹.

Соответственно, для компаний, занимающихся экспортным и импортом фактор материального обеспечения сделок на международном рынке становится актуальным. Экспортный факторинг открывает российским экспортерам пути к финансированию с отсроченным платежом, укрепляя их позиции на зарубежных рынках. Российские бизнесмены более активно пользуются беззалоговым финансированием экспорта и импорта, в частности международным факторингом, необходимым для организаций, ведущих внешнеторговую деятельность и использующих платеж несколькими партиями (рассрочку). Сейчас в факторном бизнесе используются экспортный и импортный виды. Факторинг экспорта позволяет российской компании-экспортеру достать финансирование для своих поставок получив отсрочку платежа перед покупателем из другой страны. Он работает по прямой экспортной или двухфакторной модели.

В результате использования прямой модели экспортер обращается к отечественной факторинговой компании (Экспорт-фактору), которая сотрудничает с импортером (покупателем) напрямую: она занимается оценкой финансового состояния импортера, управлением его дебиторской задолженностью и наблюдением за ней²¹⁰.

208 МВФ уравнил прогноз по росту ВВП России и мира.URL: <https://www.rbc.ru/economics/16/04/2024/661e7d509a79475152673768>

209 Товарооборот России и Китая в 2023 году побил рекорд.URL: <https://www.rbc.ru/rbcfreeneews/65a0d3e09a79477823d74f7d>

210 Проняева Л.И., Щеголев А.В., Давыдкин И.Г. Финансовое обеспечение деятельности субъектов малого предпринимательства // Вестник Академии знаний. 2022. №6 (53). С. 369-375.

В двухфакторной модели участвуют компания, занимающаяся импортом и компания, занимающаяся экспортом. Поставщик обращается к фактору в своей стране с целью получения финансирования экспорта товаров импортеру в другой стране. Факторинговая фирма страны экспортера обращается к факторинговой фирме другой страны с просьбой предоставить данные о платежеспособности импортера и объем (лимит) возможного финансирования. При условии, что факторинговая компания страны импортера подтверждает платежеспособность покупателя, факторинговая фирма страны-экспортера финансирует Поставщика, в результате чего она получает денежные средства от самого импортера или от его факторинговой компании.

В качестве положительных сторон экспортного факторинга для отечественного экспортера рассмотрим следующие аспекты: наличие возможности расширить объем экспорта через использование отсрочки платежа; увеличение объема оборотных средств экспортера, поскольку финансирование по факторингу не нуждается в залоге и увеличивается с ростом продаж; не имеющий сроков и временных ограничений характер финансирования (регулярность обслуживания); защита от риска неплатежа; простота и легкость процедуры получения платежа в сравнении с аккредитивной формой расчетов; управление дебиторской задолженностью.

Импортный факторинг, в свою очередь, дает возможность российским импортерам приобретать товары с отсрочкой платежа, укрепляя доверие между торговыми партнерами.

Рассмотрим всю цепочку производимой сделки²¹¹. Фирма-импортер в России обращается к отечественной факторинговой компании (импорт-фактору) для подтверждения платежеспособности покупателя перед зарубежным поставщиком и факторинговой компанией в стране экспортера (экспорт- фактором). В другом случае, иностранный экспортер обращается к экспорт-фактору в своей стране, для того чтобы он согласно двухфакторной модели с помощью импорт-фактора провел оценку платежеспособности импортера и установил лимит финансирования. Далее, после проверки и подтверждения финансовой надежности Покупателя, экспортер поставяет товар, в то время, как факторинговая фирма страны-экспортера финансово обеспечивает поставщика. После окончания времени отсрочки, за купленный полученный товар производится оплата.

При факторинге в виде импортного взаимоотношения подтверждаются документально посредством международного договора купли-продажи и соглашением между двумя факторинговыми компаниями (страны-экспортера и импортера) самостоятельно или согласно правилам международного факторинга международной факторинговой ассоциации, в состав которой они входят.

211 Стригунова Д.П. О международно-правовом регулировании договора факторинга // Вестник Московского университета МВД России. 2016. №8. С. 76-78

Соответственно, импортный факторинг дает возможность компании-экспортеру получить уверенность в профессиональном управлении своей дебиторской задолженности, а компании-импортеру – закупить товар на условиях с отсрочкой платежа²¹².

Цифровизация, охватывающая все аспекты экономической деятельности, также становится катализатором для расширения горизонтов международного бизнеса²¹³. Она способствует формированию новых моделей управления, распространяет передовые технологии и создает условия для сокращения издержек и увеличения эффективности торговли. Для факторинга цифровизация открывает новые возможности для автоматизации процессов и улучшения операционной деятельности компаний.

Благодаря факторинговой компании клиент-экспортер получает профессиональное удаленное обслуживание функций управления дебиторской задолженностью, в них входит анализ существующих и новых импортеров, и установление для них финансовых ограничений; отслеживание своевременной оплаты импортерами; сбор задолженности; защита от риска неплатежа Импортера.

Таким образом, в виду большого значения операций факторинга и расширение охвата международных операций возрастает роль международной ассоциации “International Factors Group” в развитии факторинга в мировой экономике.

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*Платонова Е.Д., д.э.н.
заведующий кафедрой экономической теории и менеджмента
Московский педагогический государственный университет
РФ, г.Москва
Лю Хуа
студент магистратуры
Московский педагогический государственный университет
КНР, г.Москва*

ОСОБЕННОСТИ ВЫХОДА МЕЖДУНАРОДНОЙ СТРОИТЕЛЬНОЙ КИТАЙСКОЙ КОМПАНИИ НА РОССИЙСКИЙ РЫНОК И РЫНКИ СТРАН ЕАЭС НА ОСНОВЕ СТРАТЕГИЧЕСКОГО ПОДХОДА

Аннотация. Статья посвящена выделению особенностей выхода международной строительной китайской компании на российский рынок и рынки стран ЕАЭС на основе стратегического подхода на примере China Railway Construction Corporation (CRCC). Компания активно развивает международный бизнес и имеет относительно высокую узнаваемость за рубежом благодаря реализации хорошо продуманной стратегии создания корпоративного бренда и имиджа.

Ключевые слова: внешнеэкономическая деятельность, международный бизнес, международные рынки, стратегия, стратегический подход, бренд, имидж.

*Platonova E.D., doctor of economics
Head of the Department of Economics theory and management
Moscow Pedagogical State University
RF, Moscow
Liu Hua
master's student
Moscow Pedagogical State University
China, Moscow*

SOME FEATURES OF AN INTERNATIONAL CONSTRUCTION CHINESE COMPANY ENTERING THE RUSSIAN MARKET AND THE MARKETS OF THE EAEU COUNTRIES BASED ON A STRATEGIC APPROACH

Abstract. The article is devoted to highlighting the features of the entry of an international Chinese construction company into the Russian market and the markets of the EAEU countries based on a strategic approach using the example of China Railway Construction Corporation (CRCC). The company is actively

developing international business and has relatively high recognition abroad thanks to the implementation of a well-thought-out strategy for creating a corporate brand and image.

Key words: foreign economic activity, international business, international markets, strategy, strategic approach, brand, image.

Ведущая государственная строительная компания КНР – China Railway Construction Corporation (CRCC) - при освоении российского рынка и рынка стран ЕАЭС столкнулась с необходимостью учета особенностей разработки своей стратегии выхода на данные рынки. В целом CRCC достаточно успешно справилась с этой задачей: по состоянию на 31 декабря 2023 года размер зарубежных активов CRCC составлял 973,56 млрд. юаней. Эта доля в общих активах CRCC составляет 5,85 %, что свидетельствует о потенциальной возможности роста внешнеэкономической деятельности²¹⁴.

В 2018 году Национальная комиссия Китая по развитию и реформам, а также Комиссия по надзору и управлению государственными активами и другие ведомства совместно разработали и выпустили документ «Руководство по управлению соответствием для зарубежных операций предприятий», в котором выдвигаются четкие требования по управлению деятельностью компаний («выходящие предприятия»). В документе, отмечается, что соответствие требованиям является необходимым условием для выхода предприятий и важным аспектом международной конкурентоспособности китайских предприятий.

Еще одним важным документом является «Руководство по комплаенс-менеджменту центральных предприятий» от Управления по контролю за соблюдением законодательства в части требований к предприятиям по комплаенс-менеджменту, которое было опубликовано в 2018 году. Выпуск данных документов имел положительное влияние на предприятия, осуществляющих свой зарубежный бизнес в соответствии с законом и повышающих уровень управления, в частности, комплаенс-рисками.

С 2019 года политическая и экономическая обстановка в мире становится все более сложной, в ней причудливо переплетаются торговые трения, военные споры, региональные конфликты и другие нестабильные факторы. Глобальная экономика находится в состоянии турбулентности в связи переходом от старых к новым источникам энергии, что приводит к постоянным изменениям в международной энергетической обстановке.

По мере усиления государственного регулирования в КНР и ужесточения системы регулирования зарубежной деятельности у компаний сложилось правильное понимание в отношении эффективного применения законов и правил стран и регионов, где расположены проекты. Ведение

²¹⁴About us. URL: <https://english.crcc.cn/>

деятельности в соответствии с законом и избежание зарубежных рисков стало первоочередной задачей для китайских предприятий, “выходящих в свет”.

В 2018 году на совещании руководства CRCC была выдвинута стратегия «Зарубежный приоритет». Её содержание заключалось в том, что необходимо отдавать приоритет идеям, ресурсам и внешнеэкономической политике. На практике это означало то, что вся система управления должна осознанно и полностью подчиниться новой концепции, и рассматривать за границу как важный объект деятельности. Кроме того, необходимо сформировать международное мышление для реализации заграничного приоритета. Лучшие ресурсы, такие как средства, таланты и оборудование, должны быть проинвестированы за границу, а политика предприятия должна быть максимально лояльна к зарубежным сотрудникам.

В целях реализации стратегии “Приоритет за рубежом” была создана новая платформа для инвестиций за рубежом, чтобы усилить развитие зарубежных рынков. CRCC создала новую дочернюю компанию - «China Railway Construction International Investment Group Limited» (CRCIC) с четким позиционированием для продолжения реализации стратегии “Зарубежный приоритет” под руководством новой команды руководителей CRCC на основе создания новых конкурентных преимуществ для CRCC и максимального освоения зарубежных рынков.

Сфера деятельности CRCIC включает в себя строительство железных дорог, автомагистралей, городского железнодорожного транспорта, аэропортов, терминалов, энергетических и других инфраструктурных проектов.

Большую роль в бизнесе корпорации играет строительство метротоннелей на российском рынке. Так, в июле 2021 года был прорезан первый тоннель проекта строительства Большого диаметра на восточном участке третьего пересадочного кольца Московского метрополитена, что ознаменовало успешную прорезку первого Строительство щитового тоннеля большого диаметра китайских предприятий в Европе. Общая протяженность проектной линии составляет 2,677 км. В ходе реализации проекта также была внедрена система транспортировки выбросов земли с 22-этажным ленточным бункером-суперхранилищем, что позволило вывести китайское оборудование на европейский рынок. Проект был реализован с использованием щитовой машины большого диаметра «Победа» длиной 10,88 м, разработанной CRCC, которая в настоящее время является самой большой щитовой машиной такого диаметра, экспортируемой в Европе. Он специально создан для строительства в холодных зимних условиях России и может прокладывать туннели при низкой температуре -30 °С. В период строительства проектный отдел опирался на опыт строительства метрополитена Китая и России и организовал подготовку специального технического плана безопасности

строительства с учетом геологических условий и технологических характеристик большой щитовой машины. Нулевой шум был достигнут в исторической усадьбе Коломенское - старинной деревянной постройки XV века в Москве. Использование локомотивов с резиновыми колесами для перевозки вспомогательных материалов при строительстве туннелей эффективно позволило избежать риска скольжения, вызванного чрезмерными проектными уклонами. Максимальный месячный проход при строительстве туннелей достиг 433,8 м благодаря оптимизированному режиму организации строительства. В рамках активного реагирования на эпидемию за рубежом проектный отдел сформулировал научные меры по предотвращению эпидемии. Измерения температуры тела строительного персонала на площадке проводились два раза в день, вентиляция и дезинфекция в туннеле были усилены, а также были организованы регулярные тесты на нуклеиновые кислоты для обеспечения здоровья и безопасности персонала проекта²¹⁵.

Кроме этого, CRCIC осуществляет строительство и эксплуатацию гидроэлектростанций и минеральных ресурсов, комплексное развитие недвижимости и метрополитена, а также делает инвестиции в строительство, эксплуатацию и управление индустриальными парками и промышленными зонами.

CRCC запустила морское формирование “3+5+N”, в рамках которого три дочерние компании CRCC, а именно «China Civil Engineering Group Corporation», «China Railway Construction International Group Corporation» и «China Railway Construction International Investment Group Corporation», обладают инженерными бюро и другими подразделениями для освоения международного рынка путем применения группового стратегического подхода. Особенностью стратегии CRCC является именно использование группового стратегического подхода.

На российском рынке CRCC использует свою дочернюю компанию “China Railway Construction Russia Limited” в качестве шлюза и единственного юридического лица для осуществления ряда коммерческих операций и работ по заключению коммерческих контрактов, которые имеют особенности в финансировании. Это проявляется в привлечении институтов развития на Евразийском рынке²¹⁶.

Однако строительство конкретных проектов осуществляется при привлечении других дочерних компании с четким разделением труда между ними. Например, юридическим лицом по договору с Московским метрополитеном является China Railway Construction Russia Limited, а

215 The First Tunnel of the First Large-diameter Shield Project of Chinese Enterprises in Europe Was Cut Through
URL: https://english.crcc.cn/art/2021/12/22/art_39181_3478614.html

216 Платонова Е.Д. Институты развития на Евразийском пространстве: роль в интеграционных процессах// *Пространственная экономика: проблемы региональных экономических объединений: Материалы XV Международной научной конференции*. 23 июня 2017 г. Москва, Россия. М:Перо, 2018.С.5-10

конкретным исполнителем—China Railway 16th Bureau Group Limited. Это позволило в полной мере использовать опыт China Railway 16th Bureau Group Limited в области проходки тоннелей метро. В то же время щитовые машины, используемые для проходки тоннелей, были произведены и проданы компанией China Railway Heavy Industry Group (CRHIG).

В то же время в рамках проекта «Жилой комплекс со встроенными торговыми помещениями и подземными паркингами» был заключен генеральный контракт, подписанный руководителем China Railway Construction Russia. Строительством вышеуказанного объекта занимается China Railway Construction Group, которая занимает лидирующие позиции в сфере строительства жилых домов, что является показателем профессионализма и высокого уровня мастерства в области строительства.

CRCC имеет следующие преимущества и особенности при выходе на рынки России и стран Евразийского экономического союза:

1) Наличие проверенной на практике инновационной схемы «промышленной цепи». В ключевых звеньях промышленной цепи китайская строительная корпорация обладает рядом технических преимуществ, которые могут поддержать развитие всей промышленной цепи, а также сильными возможностями проектирования и строительства инфраструктуры, что обеспечивает компании хорошую платформу для глубокого развития самой промышленной цепи.

2) Очевидные преимущества в технологической конкурентоспособности²¹⁷. CRCC обладает стратегическими ключевыми технологиями в передовых направлениях строительной отрасли, занимая высокое положение среди инженерных технологических компаний, преодолевая многие технические проблемы и обладая полным набором независимых инновационных технологий проектирования и строительства в железных дорогах (350 км/ч). Строительство подводных туннелей, проектирование и строительство бесшовного пути высокоскоростной железной дороги, производство крупномасштабной дорожно-эксплуатационной техники, щитовой конструкции и другого оборудования находятся на ведущем уровне в Китае. Компания ведет подземное инженерное строительство, интеграции четырех электрических систем и других технологий.

3) Богатый зарубежный опыт строительства на других рынках. CRCC всегда придавала большое значение развитию международного бизнеса и за долгое время накопила богатый опыт в зарубежном строительстве, а ее международное развитие не только имеет передовые позиции среди китайских строительных предприятий, но и занимает лидирующие позиции на международной арене.

217 Грей К. Ф., Ларсон Э.У. Управление проектами.— М.: Дело и Сервис, 2007.

В последние годы влияние Китая на международной арене растет, международные обмены с другими странами происходят очень часто, и CRCC корпорация успешно интегрировалась в международный рынок на ранней стадии. Она осуществила большое количество крупных проектов, имеющих символическое значение, и накопила богатый и ценный опыт.

4) Сильные кадры человеческих талантов. Стоимость рабочей силы в Китае намного ниже, чем в развитых странах Запада. Хотя стоимость рабочей силы в Китае в последние годы демонстрирует более значительную тенденцию к росту, но общее преимущество все еще сохраняется: в США, Великобритании и других странах в строительной отрасли почасовая зарплата квалифицированных рабочих составляет 10 долларов США, простых рабочих - от 6 до 7 долларов США, а в Китае она составляет лишь 1,20 – 1,30 дол. США.

Китайские строительные предприятия имеют не только очевидное преимущество в стоимости рабочей силы, но и абсолютное преимущество в ее количестве: большое количество рабочих в сельской местности обеспечивает ценные людские ресурсы для основной работы в строительной отрасли. Более того, по мере интернационализации китайских предприятий меняется концепция занятости: все больше людей готовы искать подходящую работу за рубежом.

CRCC опирается на эффективные концепции управления талантами и щедрые компенсации, чтобы получить большое количество качественных трудовых ресурсов. Компания уделяет внимание выращиванию талантов, и в процессе долгосрочного развития у нее сформировался относительно устойчивый состав талантов с большим количеством востребованных профессий - операторов и менеджеров, освоивших передовые технологии.

5) Корпоративная культура, в которой доминируют славные традиции китайских строителей. В процессе развития CRCC унаследовала и сохранила дух строителей железной дороги, суть которого заключается в том, что перед сотрудниками нет препятствий, когда надо прокладывать дороги в горной местности и строят мосты через водные магистрали. Крепкий дух позволяет переносить все тяготы и лишения. Сотрудники CRCC унаследовали крепкий дух строителей Цинхай-Тибетской железной дороги и разделяют девиз: «Особенно способные должны переносить трудности, особенно способные бороться и особенно способные преданы своему делу».

Дух строителей Цинхай-Тибетской железной дороги, которая отличалась особыми трудностями и особо острой борьбой со стихией, был культивирован в CRCC, поэтому компания ценит человеческие качества своих сотрудников. Это помогает бросать вызов трудностям и опасностям, покорять технологические вершины, лидировать в отрасли и создавать

высокую репутацию за рубежом. Сотрудников корпорации CRCC отличают преданность профессии и профессиональному долгу.

б) Хороший корпоративный имидж и имидж бренда. Большое количество высококачественных проектов, реализованных CRCC, позволило создать собственный бренд China Railway Construction Corporation (CRCC), который широко признан на внутреннем и международном уровне. Это обеспечило CRCC сильную сплоченность и гордость, эффективное исполнение всех контрактных обязательств и культивировать инновационную предприимчивость.

Хотя между строительными и производственными предприятиями внутри корпорации существует довольно большой разрыв в технологиях, опыт и уроки многих производственных предприятий заслуживают большого внимания со стороны строительных предприятий²¹⁸. В прошлом в теории и практике в основном считалось, что «расстояние» между строительными предприятиями и конечными потребителями относительно велико, и нет необходимости уделять особое внимание созданию бренда. Однако в настоящее время в процессе интернационализации CRCC в качестве особенности развития стратегии на российском и рынках стран ЕАЭС менеджмент корпорации уделяет особое внимание формированию на этих рынках хорошего корпоративного имиджа и продвигает создание бренда. Это позволяет занять одно из лидирующих мест среди корпораций строительной отрасли в гражданском строительстве. Высокое качество, передовые технологии, относительно низкая стоимость нашло признание у российских компаний.

Таким образом, CRCC на российском рынке и рынках стран ЕАЭС реализует действенную внешнеэкономическую стратегию, обладающую рядом особенностей. Китайские исследователи отмечают, что компания активно развивает международный бизнес и имеет относительно высокую узнаваемость за рубежом, а ряд проектов, построенных компанией, стали местными достопримечательностями и получили очень высокое признание.

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*Ражапова С.С.
доцент
Саматов Р.Г.
доцент*

*Ташкентский государственный транспортный университет
Узбекистан, г.Ташкент*

ПОВЫШЕНИЕ ПРИВЛЕКАТЕЛЬНОСТИ ОБЩЕСТВЕННОГО ТРАНСПОРТА С ПОМОЩЬЮ ИНТЕРНЕТ-ТЕХНОЛОГИЙ

Аннотация. Статья описывает возможные подходы к автоматизации и интеллектуализации процессов управления общественным транспортом с дальнейшей интеграцией этих процессов в состав интеллектуальной транспортной системы региона. Кроме этого, рассматриваются предусмотренные мероприятия и механизмы для осуществления данной цели.

Ключевые слова: особенности, факторы, модернизация, автоматизация, внедрение интеллектуальных транспортных систем, транспортный комплекс, Республика Узбекистан.

*Razhapova S.S.
associate professor
Samatov Rustam Gapparovich
associate professor
Tashkent State Transport University
Uzbekistan, Tashkent city*

INCREASING THE ATTRACTIVENESS OF PUBLIC TRANSPORT WITH THE HELP OF INTERNET TECHNOLOGIES

Annotation. The article describes possible approaches to automation and intellectualization of public transport management processes with further integration of these processes into the intelligent transport system of the region. In addition, the envisaged measures and mechanisms for the implementation of this goal are being considered.

Key words: features, factors, modernization, automation, implementation of intelligent transport systems, transport complex, Republic of Uzbekistan.

В эпоху становления современного информационного общества, когда информация и знания стали стратегическим фактором развития, развитие страны и обеспечение ее конкурентоспособности связано с внедрением современных информационно-коммуникационных и

«цифровых» технологий во все сферы жизни общества и государства. В настоящее время автомобильная промышленность испытывает значительный рост в развитии за счет совершенствования информационно-коммуникационных систем, основанных на использовании новейших инноваций в области телекоммуникаций, компьютерных технологий, программного обеспечения и автоматического решения проблем.

Следующим этапом развития транспорта являются интеллектуальные транспортные технологии (интеллектуальная транспортная система): взаимодействие между транспортными средствами на уровне обмена данными V2V (транспортное средство-транспорт), транспортные средства и транспортная инфраструктура V2I (транспортное средство-инфраструктура) или, в более общем плане, транспортное средство с средой вождения V2X (транспортное средство-все). инструменты.

Существует подход, основанный на развертывании сети Wi-Fi в соответствии со стандартом, который позволяет решить проблему отсутствия доступа к интернету, то есть системы V2X, использующие этот протокол, имеют возможность совместного использования. В этой системе можно обмениваться информацией друг с другом, не требуя подключения к интернету. Обмен необходимой информацией между участниками такого общения осуществляется стандартными сообщениями BSM (Basic Safety message).

В настоящее время 4,1% умных интеллектуальных устройств используются в транспорте, и одной из основных тенденций является рост числа интеллектуальных автомобилей, что способствует развитию автономного вождения. Многие новые автомобили уже имеют беспроводную связь, и мы наблюдаем быстрый рост передовых функций, которые делают новые автомобили все более беспилотными (без водителя).

Однако для этого требуется работа на многофункциональной основе. Например, автопроизводитель или город не могут начать этот процесс самостоятельно и внести свой вклад в изменение мобильности без тесного сотрудничества с другими заинтересованными сторонами. Для развития этих идей необходимы четыре основных компонента: транспортные средства, данные, политики и пользователи.

Одной из основных задач состоит из использования интернет-технологий в общественном транспорте. Использование интернет-технологий в транспорте позволит властям внедрить высокоэффективную и удобную транспортную систему, что может изменить тенденцию к увеличению предпочтений частных автомобилей.

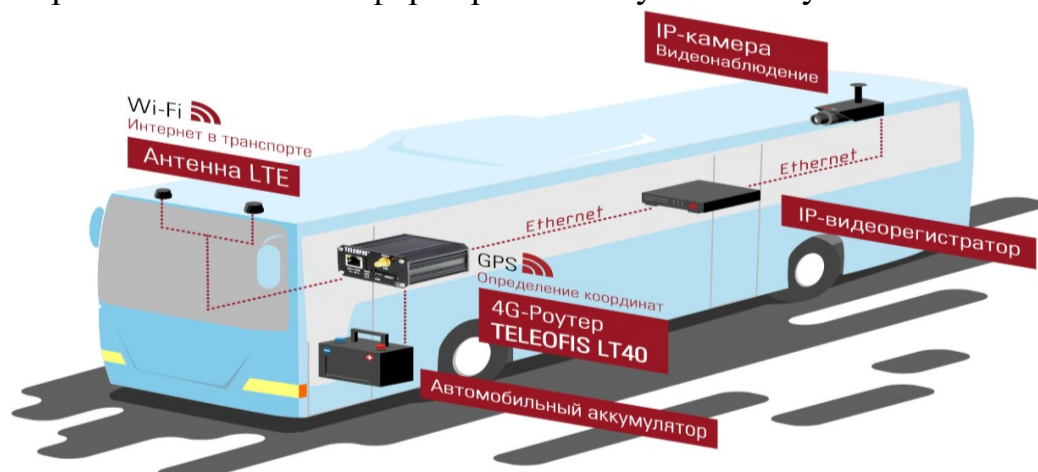
За некоторыми исключениями, системы общественного транспорта во всем мире не так эффективны, как должны и могут быть. Многие системы общественного транспорта не могут предоставить базовую услугу по своевременной доставке людей из пункта А в пункт Б, комфорт и впечатления от вождения в них также нельзя назвать превосходными.

Поэтому неудивительно, что, несмотря на растущее число людей, пользующихся общественным транспортом, очень мало людей довольны предоставляемыми услугами.

Это связано с тем, что большинство существующих систем общественного транспорта, даже в развитых странах, менее эффективны в эксплуатации и менее удобны для пользователя. Они сталкиваются с такими проблемами, как частые задержки из-за технического обслуживания и других непредвиденных обстоятельств, неправильное распределение транспортных средств по разным маршрутам, что приводит к переполненности автобусов в некоторых местах, а в некоторых наблюдается их холостой ход.

Такое неправильное управление общественным транспортом чревато иными последствиями, влияющими не только на жизнь пассажиров, но и других пассажиров. Например, неправильное планирование автобусных маршрутов приводит к “заторам” и пробкам на дорогах, что усложняет жизнь пользователям личного транспорта. Отсутствие достаточного количества автобусов на некоторых маршрутах с интенсивным движением может привести к переполнению автобусных остановок.

Предотвращение этих и других проблем с общественным транспортом требует от правительства использования разумной единой системы, которая обеспечивает координацию и эффективность транспортной системы. Такая система помогает операторам экономить средства и повышать эффективность, обеспечивая при этом комфорт пассажиров. С другой стороны, использование Интернета вещей на транспорте может помочь сформировать такую систему.



Использование Интернета вещей на транспорте дает некоторые преимущества. ИТ-устройства можно не только устанавливать в общественном транспорте, таком как автобусы и поезда, но и включать в городскую инфраструктуру. На дорогах, уличных фонарях, железнодорожных платформах, автобусных остановках, железных дорогах и путях маршрутного такси датчики, дорожные знаки, установленные таким

образом, чтобы они были видны участникам движения, позволяют эффективно управлять дорожным движением. Это в сочетании с данными, собранными с устройств, используемых пассажирами, позволяет транспортным органам предлагать своим гражданам расширенные услуги без потери чувствительности.

Обеспечение эффективного сотрудничества требуют осуществление ряд мероприятий. Поскольку существующие транспортные системы непредсказуемы и подвержены задержкам, пассажиры вынуждены планировать свои поездки с учетом этих задержек. Это означает, что они уходят из дома или с работы намного раньше и часто ждут на вокзале или автобусной остановке, тратя свое драгоценное время. Основная причина этого - отсутствие данных в реальном времени о текущем состоянии автобусов и поездов. Хотя они знают стандартное расписание поездов и автобусов, пассажиры не знают наверняка, следуют ли эти автобусы этому расписанию в указанное время. Эту проблему можно решить, используя отслеживание автобусов и поездов с поддержкой интернета вещей для предоставления пассажирам информации о состоянии в режиме реального времени. Эту информацию пассажиры могут просматривать через специально загруженные мобильные приложения на своих смартфонах.

Кроме того, пассажиры также могут узнать, полны ли автобусы и поезда или пусты. Они также могут знать количество людей, ожидающих на автобусной остановке или вокзале. Таким образом, они смогут узнать, когда лучше всего начать поездку на работу. Таким образом, пассажиры могут знать точное время для своего автобуса и поезда и вовремя покинуть свои дома, чтобы сесть на следующий пустой автобус или поезд. Им не нужно тратить время на ожидание следующей пустой машины.

Техническое обслуживание автомобилей и оборудования. Одной из основных причин недовольства пассажиров большинством систем общественного транспорта, особенно в развивающихся и слаборазвитых странах, является частая поломка транспортных средств или инфраструктуры. Это временно приостанавливает обслуживание и оставляет пассажиров застрявшими в середине поездки.

Это приносит большой дискомфорт и неуверенность пассажирам, а также приводит к нарушению работы всей транспортной сети и задерживает поездки большего количества людей. Это оказало общее влияние на общую производительность города или региона, зависящую от транспортной системы. Чтобы этого не произошло, власти должны внедрить современные методы технического обслуживания, такие как профилактическое и прогнозное обслуживание.

Поддержание различных настроек транспортных средств и инфраструктуры может помочь выявить проблемы на ранней стадии, когда системы Интернета вещей могут использоваться для постоянного мониторинга рабочего состояния. Эти параметры могут включать

температуру двигателя, давление в шинах, уровень топлива и аккумулятора, нагрузку на рельсы и другие аналогичные факторы, указывающие на настройку системы. Датчики могут постоянно контролировать эти параметры, чтобы обнаруживать любые неисправности и уведомлять соответствующий персонал, когда начинается техническое обслуживание. Это приводит к повышению эффективности обслуживания, минимальным перебоям в работе и безопасности пассажиров.

Оптимизация транспортных маршрутов. Используя ИТ-датчики на автобусных остановках и платформах поездов, транспортные органы могут точно оценить ситуацию в этих местах. Они могут знать, сколько людей нужно забрать с какой станции или станции. Они могут использовать эту информацию для разделения соответствующего количества транспортных средств на разные направления. Они также могут использовать данные о дорожном движении, собранные с датчиков, установленных на обочинах дорог, сигнализациях и уличных фонарях, для планирования самых быстрых маршрутов.

Кратчайший маршрут между двумя точками может быть непрерывно передан водителям автобусов, которые на основе этой информации могут как можно быстрее доставить пассажиров к месту назначения. Информация, полученная через эту систему, может быть использована в долгосрочной перспективе для планирования новых транзитных маршрутов и налаживания новых автобусных и железнодорожных перевозок. Эта информация может быть полезна при планировании и управлении городом, а также может помочь в принятии решений, связанных с инфраструктурой.

Еще одним важным фактором является повышение безопасности дорожного движения и минимизация загрязнения окружающей среды. Очевидным и долгосрочным преимуществом наличия высокоэффективной и удобной для пассажиров транспортной системы с использованием ИТ является предпочтение общественного транспорта личным транспортным средствам. Благодаря ИТ общественный транспорт становится более надежным, люди предпочитают использовать его больше не только по экономическим причинам, но и для общего удобства.

Это уменьшит количество частных автомобилей на дорогах и сделает общественный транспорт более быстрым и безопасным. Город, который во многом зависит от общественного транспорта, также значительно сократит свой углеродный след, что принесет пользу на экологическом фронте. Таким образом, внедрение ИТ в транспорт может привести к развитию действительно умных и устойчивых городов. ИТ, хотя и является потенциально революционным с точки зрения его преимуществ и применения, не является окончательным решением проблем современных транспортных систем. Другие существующие и новые виды технологий также играют роль в улучшении работы общественного транспорта.

Кроме того, есть много других инструментов и технологий, которые градостроители должны учитывать при планировании комфорта. Таким образом, они могут гарантировать, что смогут строить действительно “умные” и готовые к будущему города.

Использованные источники:

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Ражапова С.С.

доцент

Шакиров А.В.

студент

Ташкентский государственный транспортный университет

Узбекистан, г.Ташкент

ОСНОВНЫЕ НАПРАВЛЕНИЯ ПРИМЕНЕНИЯ ИНТЕРНЕТ-ТЕХНОЛОГИЙ В АВТОМОБИЛЬНОМ ТРАНСПОРТЕ

Аннотация. Статья описывает возможные подходы к автоматизации и интеллектуализации процессов управления автомобилями с дальнейшей интеграцией этих процессов в состав интеллектуальной транспортной системы региона. Кроме этого, рассматриваются предусмотренные мероприятия и механизмы для осуществления данной цели.

Ключевые слова: особенности, факторы, модернизация, автоматизация, внедрение интеллектуальных транспортных систем, транспортный комплекс, Республика Узбекистан.

Razhapova S. S.

associate professor

Shakirov A. V.

student

Tashkent State Transport University

Uzbekistan, Tashkent city

THE MAIN DIRECTIONS OF APPLICATION OF INTERNET TECHNOLOGIES IN ROAD TRANSPORT

Annotation. The article describes possible approaches to automation and intellectualization of car management processes with further integration of these processes into the intelligent transport system of the region. In addition, the envisaged measures and mechanisms for the implementation of this goal are being considered.

Key words: features, factors, modernization, automation, implementation of intelligent transport systems, transport complex, Republic of Uzbekistan.

Сегодня автомобильная промышленность – одна из самых инновационных отраслей. В последние годы автомобили превратились из механических устройств, потребляющих нефтяные ресурсы, в компьютеры, которыми можно эффективно управлять с помощью электрических

приводов. Например, в связи с усилением конкуренции на мировых рынках логистическая отрасль вынуждена искать пути повышения эффективности. В настоящее время основной целью логистической отрасли является снижение затрат и задержек при транзите товаров, повышение прозрачности операций и минимизация участия человека в процессах. В ближайшем будущем основным направлением развития станет внедрение решений и технологий, связанных с интернет-технологиями.

В эпоху становления современного информационного общества, когда информация и знания стали стратегическим фактором развития, развитие страны и обеспечение ее конкурентоспособности связано с внедрением современных информационно-коммуникационных и «цифровых» технологий во все сферы жизни общества и государства.

С этой целью 05.10.2020 года принят президентский указ № ПФ-6079, об утверждении стратегии «Цифровой Узбекистан – 2030» и меры по ее эффективной реализации. Указом утверждены:

1. Стратегия «Цифровой Узбекистан – 2030, а также «дорожная карта» по ее реализации. "Дорожная карта" реализации стратегии охватывает цели в области развития электронного правительства, цифровой индустрии, цифрового образования и цифровой инфраструктуры.

2. Программы цифровой трансформации территорий и отраслей на 2020-2022 годы.

В рамках программы:

➤ уровень подключения населенных пунктов к сети Интернет, в том числе за счет увеличения количества портов широкополосного доступа до 2,5 млн., строительства 20 тыс. км оптоволоконных линий связи и развития сетей мобильной связи, будет доведен с 78% до 95%;

➤ внедрение более 400 информационных систем, электронных услуг и других программных продуктов в различных сферах социально-экономического развития регионов;

➤ организация обучения основам компьютерного программирования с охватом 587 тыс. человек, в том числе 500 тыс. молодых людей в рамках проекта «один миллион программистов»;

➤ внедрение более 280 информационных систем и программных продуктов по автоматизации процессов управления, производства и логистики на предприятиях реального сектора экономики;

➤ для повышения цифровой грамотности и квалификации сотрудников хокимов, государственных органов и организаций в регионах, обучения их информационным технологиям и информационной безопасности будут прикреплены соответствующие высшие учебные заведения, а 12 тысяч их сотрудников будут обучены в области информационных технологий”.

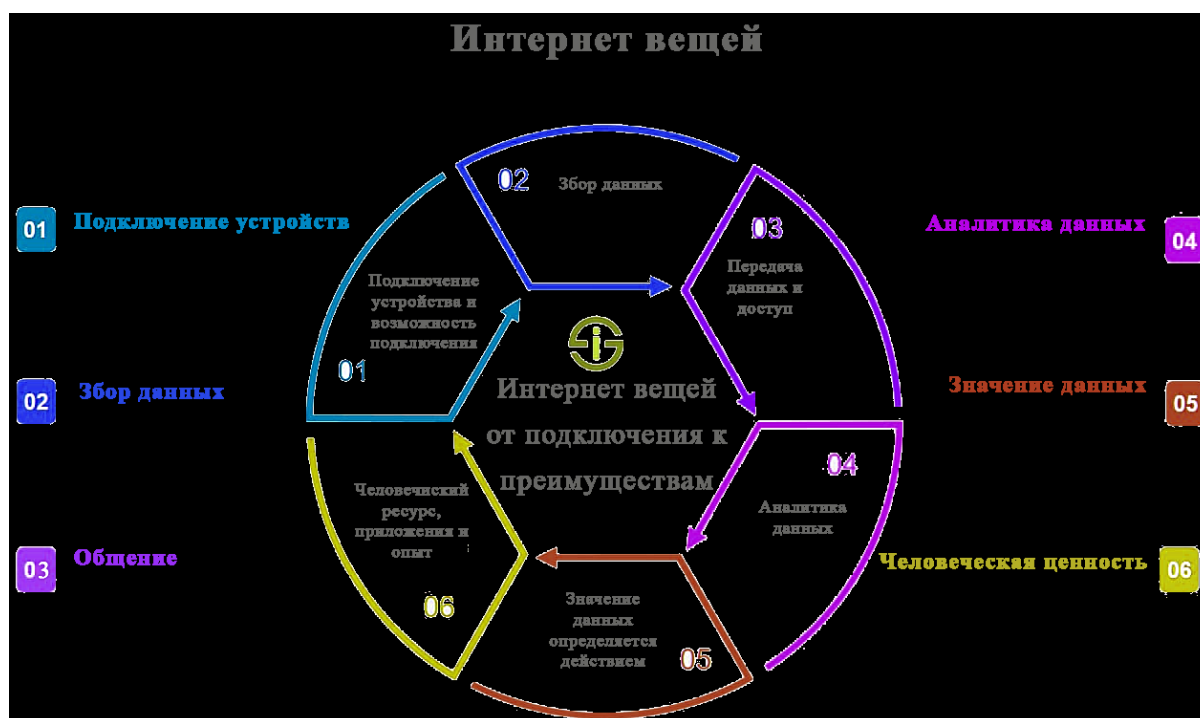
В соответствии со стратегией “Цифровой Узбекистан — 2030” в стране реализуется комплекс мер по цифровизации отраслей и территорий

экономики, внедрению государственных информационных систем и электронных услуг, а также по обеспечению широкого использования цифровых технологий в сфере народного образования, государственных услуг, судебной, финансовой и банковской систем.

Реализация программы «Цифровой Узбекистан – 2030», широкое внедрение технологий «Умный», «Безопасный город», «Интернет вещей», дальнейшее развитие телекоммуникационной инфраструктуры, на этой основе 30-процентный рост ВВП страны, а также рост международных индексов, готовность к цифровой экономике и развитие ИКТ", приоритетной задачей является обеспечение доступа к передовым странам.

Согласно анализу ученых всего мира, в течение 2008-2009 годов количество подключенных к интернету устройств и систем превысило количество людей на земле, а к 2016 году их количество составило 25 миллиардов. А к 2021 году этот показатель увеличился в два с половиной раза, до 63 миллиардов. В этом представлении процессы перехода от понятия «интернет и люди» к понятию «интернет вещей», то есть IoT (Интернет вещей), идут вверх. «Интернет вещей» (Internet of Things - IoT) - это система взаимодействия и обмена информацией между различными устройствами и машинами, которая позволяет автоматизировать процессы управления и контроля с помощью различных «интеллектуальных устройств» и значительно снизить участие в них людей.

Стратегия «Цифровой Узбекистан – 2030» разработана в целях обеспечения ускоренного цифрового развития отраслей экономики, социальной сферы и системы государственного управления, в том числе дальнейшего совершенствования механизмов предоставления электронных государственных услуг. Настоящая стратегия определяет стратегические цели, приоритеты и среднесрочные и долгосрочные задачи развития цифровой экономики и электронного правительства Республики Узбекистан, а также служит основой для более широкого внедрения цифровых технологий, исходя из целей устойчивого развития ООН и приоритетов, определенных в рейтинге развития электронного правительства.



Поскольку мы рассматриваем применение технологий в автомобильном транспорте, этот термин необходимо уточнить. Следовательно, коммерческий транспорт - это любое транспортное средство, используемое в процессе предпринимательской деятельности, т. е. эксплуатация которого приводит к получению прибыли. Решения и технологии для подключения транспорта к сети уже получили широкое распространение. Перспективными направлениями использования интернет-технологий в коммерческих автомобилях являются:

- управление автопарком (управление техническим обслуживанием транспорта, автоматическая диспетчеризация, интеграция ERP-системами. ERP (Enterprise Resources Planning) – [управление корпоративными ресурсами]. В основе ERP лежит создание единого хранилища данных (репозитория), которое объединяет в себе все данные, собранные организацией в процессе осуществления бизнес-операций.
- автономный транспорт (помощник водителя, автопилот на автомагистралях, полная автономия в будущем);
- обеспечение безопасности (предотвращение кражи топлива, неправильное использование транспортных средств, автоматическое хранение данных и развертывание облачных технологий);
- «умная» инфраструктура (централизованное управление, мониторинг состояния и загрузки инфраструктуры);
- транспорт, связанный с другой инфраструктурой (управление движением, режим движения).

Некоторые технологии, такие как автономные транспортные средства, еще не нашли широкого применения в коммерческом транспорте, но их

внедрение неизбежно в будущем. Транспортное средство, связанное с другой инфраструктурой (инновационное), - это транспортное средство, которое связывается с другими транспортными средствами, сетями и услугами, охватывающими обширную инфраструктуру, и считается элементом экосистемы интернет-технологий. По мере увеличения количества инновационных автомобилей на наших дорогах, безусловно, будет доступно больше данных, которые будут включать различные данные и потенциальную статистику, которую мастерские или автопроизводители могут использовать, например, для улучшения качества автомобилей.

Это также способствует развитию «умного» страхования, при котором компании могут получать статистические данные о характере движения и неисправностях отдельных агрегатов тех или иных марок автомобилей, которые затем учитываются при определении стоимости страховки. Важно понимать, что инновационный автомобиль состоит не только из набора данных и нескольких вспомогательных датчиков, но и из множества «умных» устройств.

Для современных автомобилей сейчас необходимы новые системы, такие как:

- адаптивный круиз-контроль (Adaptive Cruise Control), позволяющий автоматически поддерживать желаемую скорость автомобиля при сохранении заданного расстояния от переднего движущегося транспортного средства;
- аварийное торможение-система, направленная на предотвращение дорожно-транспортных происшествий путем применения торможения транспортного средства в чрезвычайной ситуации;
- технология обнаружения пешеходов (Pedestrian Detection), которая распознает людей рядом с автомобилем и замедляет или останавливает автомобиль, чтобы предотвратить столкновение;
- система предотвращения столкновений контролирует территорию вокруг транспортного средства и предупреждает водителя, если есть риск столкновения;
- распознавание дорожных знаков (Traffic Sign Recognition) обеспечивает звуковое или визуальное уведомление в случае нарушения их инструкций;
- предупреждение о выходе из коридора;
- предупреждение о движении (Cross Traffic Alert), сигнализирующее о движении транспортных средств в направлении пересечения;
- обнаружение слепых зон (Blind Spot Detection) – контроль незаметных для водителя мест в непосредственной близости от автомобиля, обнаружение обгоняющих машин;
- предупреждение о заднем столкновении (предупреждение о заднем столкновении);

➤ помощь при парковке (Park Assistance) - это функция, которая помогает вашему автомобилю маневрировать во время парковки.

Интеллектуальные системы, такие как подключенные к сети транспортные средства, интеллектуальные системы управления движением и встроенные датчики на дорогах и мостах, приближают нас к идее “умных городов” с меньшим трафиком и меньшим энергопотреблением.

Использованные источники:

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*Расулов У.Ш.
старший преподаватель
Андижанский институт сельского хозяйства и агротехнологий*

ХАРАКТЕРИСТИКА ОСНОВНЫХ БОЛЕЗНЕЙ БАКЛАЖАНА В УСЛОВИЯХ АНДИЖАНСКОЙ ОБЛАСТИ УЗБЕКИСТАНА

Аннотация. В статье представлены данные по изучению микобиоты баклажанов в условиях Андижанской области Узбекистана, а также определение наиболее часто встречаемых и вредоносных болезней данной культуры.

В ходе исследований было выявлено 17 видов фитопатогенных грибов, принадлежащих к 4 классам, 6 секциям, 8 семействам и 14 родам. Наиболее распространенными и вредоносными являются такие болезни как, фузариозный вилт, фитофтороз, серая гниль и альтернариоз.

Ключевые слова: баклажан, фитопатогены, грибные болезни, фузариоз, фитофтороз, серая гниль, альтернариоз, распространенность болезни.

*Rasulov U.Sh.
senior lecturer
Andijan Institute of Agriculture and Agricultural Technologies*

CHARACTERISTICS OF THE MAIN EGGPLANT DISEASES IN THE ANDIZHAN REGION OF UZBEKISTAN

Abstract. The article presents data on the study of eggplant mycobiota in the Andijan region of Uzbekistan, as well as the identification of the most common and harmful diseases of this crop.

Thus, 17 species of phytopathogenic fungi were identified, belonging to 4 classes, 6 sections, 8 families and 14 genera. The most common and harmful diseases are fusarium wilt, late blight, gray mold and alternaria.

Key words: eggplant, phytopathogens, fungal diseases, fusarium, late blight, gray mold, alternaria, disease prevalence.

Введение.

Баклажан, паслён тёмноплодный (*Solanum melongena* L.), растение из семейства паслёновые (*Solanaceae*), широко распространённая овощная культура.

Как и у других сельскохозяйственных культур одним из факторов, препятствующих обильному, качественному и экологически чистому урожаю овощных культур, являются различные заболевания, возникающие

под воздействием различных микроорганизмов (грибов, бактерий, вирусов), а также неблагоприятной внешней среды. На основе изучения микобиоты сельскохозяйственных культур, в том числе баклажанов из представителей семейства пасленовых, установлены основные заболевания, виды болезнетворных микроорганизмов, закономерности их развития и биоэкологическая характеристика видов, имеющих важное хозяйственное значение.

В нашей республике микобиота баклажанов и болезни вызываемые патогенными видами, а также меры борьбы с ними на плановой основе не изучаются, а информация об исследованиях, направленных на решение этих проблем, практически отсутствует.

В связи с чем целью и задачами наших исследований было – изучение видового состава возбудителей болезней баклажана, выявление основных болезней, а также разработка системы борьбы с болезнями, имеющими важное экономическое значение в Андижанской области.

Материал и методы исследования.

Сбор материала осуществлялся путем маршрутных обходов территории в течение всего вегетационного сезона. Гербаризация образцов проводилась по общепринятой методике. Определение грибов проводилось в лабораторных условиях путем микроскопирования непосредственно больных частей растений. Для качественного определения пользовались методом «влажных камер» (Дудка и др., 1982).

При определении пользовались отечественными и зарубежными определителями и монографиями: П.Н.Головин (1960), Л.Л.Осипян (1975), Н.М.Пидопличко (1977-1978), А.Я.Семенов, Л.П.Абрамов, М.Х.Хохряков (1980), М.К.Хохряков и др. (1984), Н.П.Гелюта (1988), «Флора грибов Узбекистана» (1983-1990) и др., а также многочисленным научными статьями в периодических журналах и сборниках.

Для определения вредоносности заболевания определялись интенсивность или степень поражения растений (Дудка и др., 1982), для чего использовали глазомерную оценку поражения в баллах.

Балл - Степень поражения растения поверхности растений, %

0 - 0, растение здорово

1 – 10 % слабое поражение органа или растения

2 - 1 - 25 %, поражение среднее, сильно пораженные органы не встречаются

3 - 26-50 % поражение среднее, некоторые органы или растения поражения в сильной степени

4 - Свыше 50 %, сильное поражение органов или растений, возможна их гибель.

Процент развития болезней определяли по следующей формуле:

$$R = \sum(a \cdot b) / NK \cdot 100$$

где: P - процент развития болезни,
 $\sum(a*b)$ - сумма произведения числа пораженных растений (a) на соответствующий им балл поражения (b),
N - общее число учетных растений,
K - высший балл поражения шкалы.

Полученные результаты

Из гербарных образцов, собранных из больных частей баклажанов в условиях Андиганской области, выявлено 17 видов грибов, принадлежащих к 4 классам, 6 секциям, 8 семействам и 14 родам. Наибольшее количество выявленных видов – 13 видов – представляли дейтеромицеты. Далее идентифицировано 2 вида, принадлежащих к классу Oomycetes, по 1 виду, принадлежащему к классам Ascomycetes и Zygomycetes. В качестве наиболее распространенных возбудителей отмечено 3 вида из родов *Alternaria* и *Fusarium* и по 1 виду из других родов.

По результатам наблюдений на баклажанах зафиксированы заболевания фузариозом, серой гнилью, альтернариозом, фитофторой и корневыми гнилями. При определении степени зараженности растений баклажанов видами грибов, широко распространенными и наносящими большой ущерб овощной продукции, установлено, что наиболее сильный уровень поражения баклажанов проявляется фузариозным увяданием (42,6%), следом идут фитофтороз (38,0%), серая гниль (29,7%), альтернариоз (22,6%), корневые гнили (12,4%) и мучнистая роса (3,0%), на основании чего был сделан вывод, что наиболее вредоносными заболеваниями баклажана являются: фузариоз, фитофтороз, альтернариоз и серая гниль (табл. 1).

Фузариозное увядание – одно из наиболее вредоносных заболеваний баклажанов. Фузариоз вызывается видами *Fusarium*, *F. oxysporum* f.sp. *melongenae*, *F. solani*, *Fusarium* sp. Грибы вызывают болезнь увядания растений. Листья начинают увядать снизу куста и постепенно засыхают. Позже заметно, что плодоножки и плоды начинают увядать, теряется тургорное состояние, пораженная ткань темнеет. Если оставить пораженное растение на месте, на его поверхности появляются белый или розоватый мицелий гриба.

Табл. 1.

Уровень поражаемости посевов баклажанов фитопатогенными грибами, % (2020-2023 гг.)

№	Болезнь	Степень поражаемости, %
1	Фузариозное увядание (<i>Fusarium oxysporum</i> f.sp. <i>melongenae</i> , <i>Fusarium solani</i> , <i>Fusarium</i> sp.)	42,9
	Фитофтороз (<i>Phytophthora infestans</i>)	31,0
3	Серая гниль (<i>Botrytis cinerea</i>)	29,6
4	Альтернариоз (<i>Alternaria tomatophila</i>)	22,6
5	Мучнистая роса (<i>Leveillula taurica</i>)	3,0
6	Корневая гниль (<i>Rhizoctonia solani</i> , <i>Pythium debaryanum</i> , <i>Fusarium solani</i> , <i>Fusarium</i> sp.)	12,4

Фузариозное увядание проявляется, когда листья баклажанов желтеют, чаще с одной стороны, а растения становятся бледными. Здоровые листья засыхают, но не опадают, а висят на ветвях. Ветви также могут увядать с одной стороны растения, а затем увядает все растение. Пораженные растения становятся слабыми и чахлыми, а затем увядают. Причина увядания растения в том, что проводящие ткани заполняются мицелием гриба и распространяются от нижней части растения к верхним слоям и растение повреждается токсинами, вырабатываемыми грибом.

Данные по распространенности фузариозного увядания по разным районам севера, запада и востока Андижанской области показаны в таблице 2.

Табл.2.

Распространение фузариозного увядания баклажанов в Андижанской области (2020-2023 гг.)

Район Андижанской области	Пораженность фузариозом посадок баклажана, %
Кургантепинский р-н	52,0
Алтынкульский р-н	42,0
Избосканский р-н	48,0
Андижанский р-н	29,5
Среднее значение по области	42,9

Согласно полученным данным, средняя распространенность фузариоза по территории Андижанской области составила 42,9%.

Заболевание фитофтороза – возбудитель которого является *Phytophthora infestans*, серьезно повреждающий листья, стебли, плоды и корни баклажанов. Заболевание наблюдалось на разных стадиях вегетации. Согласно литературным источникам, растение баклажана может поражаться заболеванием фитофторой в любое время сезона и вызывает гниение плодов, ожоги листьев и стеблей.

Данные по распространенности фитофтороза по разным районам Андижанской области показаны в таблице 3.

Табл.3.

Распространение фитофтороза баклажанов в Андижанской области
(2020-2023 гг.)

Район Андижанской области	Пораженность фитофторозом посадок баклажана, %
Кургантепинский р-н	30,0
Алтынкульский р-н	32,0
Избосканский р-н	36,0
Андижанский р-н	26,0
Среднее значение по области	31,0

Согласно полученным данным, средняя распространенность фузариоза по территории Андижанской области составила 31%.

Альтернариоз баклажанов. На баклажанах выявлено 3 вида р. *Alternaria*. Виды *Alternaria alternata* и *A. tenuissima* относятся к мелкоспоровым видам отмечаемых на большом количестве сельскохозяйственных культурах. Согласно, Ф.Б. Ганнибала (2011), ранее на растениях семейства пасленовых приводился вид *A. solani*, который чаще отмечается на картофеле. В соответствии с идентификационным ключом приводимым Ф.Б. Ганнибалом (2011) к определению возбудителей альтернариозов и в силу морфологической обособленности основным возбудителем альтернариозов баклажана нами был определен вид *Alternaria. tomatophila*.

Данные по распространенности альтернариоза по разным районам Андижанской области показаны в таблице 4.

Табл.4.

Распространение альтернариоза баклажанов в Андижанской области
(2020-2023 гг.)

Район Андижанской области	Пораженность фитофторозом посадок баклажана, %
Кургантепинский р-н	24,0
Алтынкульский р-н	28,0
Избосканский р-н	22,0

Андижанский р-н	15,4
Среднее значение по области	22,6

Согласно полученным данным, средняя распространенность альтернариоза по территории Андижанской области составила 22,6%.

Серая гниль баклажанов вызывается возбудителем *Botrytis cinerea*. Это заболевание повреждает листья, стебли и плоды баклажанов. По литературным источникам установлено, что возбудитель серой гнили распространен в разных родах более чем на 100 растениях по всему миру.

Данные по распространенности серой гнили по разным районам Андижанской области показаны в таблице 5.

Табл.5.

**Распространение серой гнили баклажанов в Андижанской области
(2020-2023 гг.)**

Район Андижанской области	Пораженность фитофторозом посадок баклажана, %
Кургантепинский р-н	32,0
Алтынкульский р-н	28,0
Избосканский р-н	34,5
Андижанский р-н	24,0
Среднее значение по области	29,6

Согласно полученным данным, средняя распространенность серой гнили по территории Андижанской области составила 22,6%.

Выводы

Из всего выше изложенного можно отметить, что из 17 выявленных видов фитопатогенных грибов поражающих баклажан в Андижанской области Узбекистана наиболее распространенными и вредоносными являются такие болезни как, фузариозный вилт, фитофтороз, серая гниль и альтернариоз.

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**Рахмонова М.К.
Исомиддинов М.Н.**

КАЛИФОРНИЯ ҚАЛҚОНДОРИ БИОЛОГИЯСИ ЗАРАРИ

Анотация: diaspidiotus perniciosus Comst. Ташки карантин объекти хлсобланади. Ўзбекистонга кириб қолиши мумкин булган бу объект жуда хавфли булиб, 150 дан ортик дарахт ва манзарали экинларда учрайди. Унинг ватани шимолий-шаркий Хитой булиб, у ердан Америка китъасига, у ердан эса 1930 йилларда Европа мамлакатларига келиб қолган.

Калит сўзлар; Diaspidiotus perniciosus Comst дарахт хашиорат объект

**Rakhmonova M.K.
Isomiddinov M.N.**

DAMAGE BIOLOGY OF CALIFORNIA SHIELD

Annotation: diaspidiotus perniciosus Comst. The external quarantine object has been created. This object, which can enter Uzbekistan, is very dangerous and is contained in more than 150 trees and ornamental crops. Its homeland is northeastern China, from there it came to the American continent, and from there to European countries in the 1930s.

Keywords: Diaspidiotus perniciosus Coms tree insect objects.

Кириш Ер юзида иқлимнинг глобал ўзгариши, аҳоли миқдорининг шиддат билан ўсиши, ишлаб чиқариш жараёнининг жадаллашиши кузатилаётган бир даврда, барча соҳалар каби озиқ-овқат етиштириш саноатида қатор муаммолар кўпаймоқда. Ушбу муаммоларни фақатгина илмий асосланган янги инновацион технологиялар яратиш ва уларни жорий қилиш натижасида олинган манбалар орқали ҳал этиш мумкин. Бутунжаҳон озиқ-овқат ташкилотининг (ФАО) маълумотга кўра фақатгина ер юзида етиштирилаётган экинларнинг ўртача 20 фоиздан 40 гача мўлган миқдори зарарқунанда ва касалликлар туфайли нобуд бўлмоқда.

Хозиги кунда бу хашарот кўшни давлатлардан Туркменистон ва Тожикистон ҳамда Кавказ, Украина, Молдавияда учрайди. Таърифи. Ургочи зотининг ранги лимон каби сарик, шакли ноксимон, узунлиги 1,3 мм, кузи, оёғи ва муйлови йук. К^алкони юмалок, улчами 2 мм, б>фтган, ранги қорамтир ёки қунақ, уртасида 2 та личинка пустининг изи бор. Х^аёт кечириши. Биринчи ёш личинкалари қалқон остида қишлоқ чикади. Булар одатдаги 1-ёш личинкалардан фарқ қилиб, йирикрок қалқон билан (2-2,5 марта катта) қопланган. Совуқ тушиши билан қолганлари (етук зот ва 2-ёш личинкалари) улиб кетади. Февралнинг охирида уйқудаги личинка

иккинчи ёшга ута бошлайди. Лекин киш пайтида 20- 50% личинкалар улиб кетади. Дарахтлар кукара бошлаши билан личинкалар озикланишни бопшайди ва 2 марта пуст ташлаб жинсий етук ургочи ва эркак зотларга айланади. Эркак ва ургочи зотларнинг нисбати уртача бирга-бир тугри келади. Иккинчи бугин учун урчиган ургочи зот 1 ойча етилгач, тирик туга бошлайди. Бопшача килиб айтганда, личинкалар она танасида тугилишдан олдин тухумдан очиб чиккан булади. Булар хам дарахт буйлаб таркаб кетиб янги бугинни бошлаб беради. Узбекистан шароитида калифорния калкондори мавсумда 4-5 та бугин бериши мумкин, У Тожикистон ва Озарбайжон шароитида 4 та бугин беради (Васильев, Лившиц, 1984). Х,ар кайси бугин личинкаларидан бир кисми кишлашга қолади. Ва нихоят, охирги авлодининг 1-ёш личинкалари махсус тайёргарлик куриб, она калкони остида кишлаб қолади. Аммо, шароит мавжуд булса (иссикхона ва бошка хона³⁰⁷ донлардаги усимликлар) калифорния калкондори йил мобайнида тинмай ривожланиши мумкин. Калифорния калкондори асосан кучатларда жойдан-жойга таркалиши мумкин. Зарарланган мсвада савдо йуллари билан хам таркалиш имкониятига эгаКалифорния қалқондори асосан мевали дарахтларга, резавор мева, буталарга ва манзарали ўсимликларга зарар етказди. Ушбу ҳашарот кўпайиб кетганда олма дарахти пўстлоғи узунасига ёрилиб, шохларни ва бутун дарахтларни қуритиб кўяди. Олма меваларидаги ширани сўриб, тўқ кизил доғ туширади. Дарахтни шох, новда, барг, дарахт пўстлоғи ва мевасини зарарлайди. Натижада дарахтлар кам ҳосил беради, ёш дарахтлар куриб қолади.

Калифорния қалқондорининг қалқони юмалоқ ва япалоқ, оч жигар ёки кул ранг тусда бўлиб, диаметри 1,0-1,5 мм дан 2 мм гача бўлади. Қалқоннинг четлари ўртасига қараганда оч тусда бўлиб, эркагининг қаноти бир жуфт бўлади. Ёш личинкаси озиклана бошлаганда оқимтир шира чиқаради, бу шира кейинчалик қалқонга айланади.Биринчи ёш личинкалари шох ва новдалардаги қалқон остида кишлайди. Баҳорда, олма дарахти куртаклари бўрта бошлаганда озикланишни бошлайди ва пўст ташлаб жинсий етук ургочи ва эркак зотларга айланади. Урчиган ургочи зот 1 ойча етилгач 100-120 тадан тирик личинкалар туга бошлайди. Туғилган «дайди» личинкалар қалқон остидан чикқандан сўнг бир неча соат давомида дарахт бўйлаб таркалиб пўстлоқ ва меваларга ёпишган ҳолда ўзига қалқон ясай бошлайди. Озикланиши давомида пўст ташлаб иккинчи ёшга ўтган личинкалари жинсий етук ургочи ва эркак зотларга айланади ва 2-авлод «дайди» личинкалари пайдо бўлади. Шу тариқа йил давомида 3-4 та авлод беради. Одатда ҳар бир авлод биринчи ёш личинкаларининг бир қисми кишлашга қолади. Кўчат ва зарарланган мева орқали жойдан-жойга тарқалади.

Зараркунандаларга қарши уйғунлашган кураш чоралари

Эрта кўкламда буталган шох ва новдаларни ёқиш, дарахтлар танасини тозалаб танасини оқлаш, боғларни ёшартириш лозим. Мавсум вақтида тухумдан чикқан қалқондорлар сонини билиш учун диаметри 3-5 см бўлган

скочни шохларга ёпишқоқ тарафини тепага қилиб маҳкам боғланади. Агар маҳкам бўлмаса, ёш қалқондор личинкалари тагидан ўтиб кетади. Бир боғдан камида 10 та дарахтнинг 2 та шохига скочни боғлаб чиқилади. Ҳар ҳафтада янги скочга алмаштирилади. Ҳар бир жойда скочга ёпишиб қолган қалқондорларни санаб, ёш қалқондорларни қачон кўпайишини аниқлаш мумкин. Скочдаги қалқондорлар сонига қараб пестицид билан ишлов ўтказиш белгиланади. Кимёвий ишловлар қалқондорларнинг биринчи ёш личинкалари кўпайган даврда сепилади. Куртаклар бўртиш вақтида ёғли воситаларни қишлаётган зараркунандаларга қарши пуркаш энг самарали ҳисобланади. Куртаклар бўртиш вақтида дарахтларга минерал мойлар билан таркибида хлорпирифос ёки диазинон бўлган препаратларни аралаштириб ишлов берилади. Вегетация даврида эса таркибида дельтаметрин, диметоат, имидаклоприд, лямбдациголотрин, малатион ва хлорпирифос бўлган препаратлар билан ишлов берилади.

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*Садуллаев Д.М.
ассистент
Джизакский политехнический институт
Республика Узбекистан, г.Джизак
Шингисов А.У.
профессор
Южно-Казахстанский государственный
университет имени Мухтара Ауэзова
Республика Казахстан, г.Шымкент*

**ИССЛЕДОВАНИЕ И РАЗРАБОТКА ИННОВАЦИОННЫХ
СПОСОБОВ УТИЛИЗАЦИИ ОТХОДОВ, ОБРАЗУЮЩИХСЯ ПРИ
ПЕРЕРАБОТКЕ ФРУКТОВ И ОВОЩЕЙ, С ЦЕЛЬЮ ИХ
ПРЕОБРАЗОВАНИЯ В ЦЕННЫЕ ПРОДУКТЫ, ТАКИЕ КАК
БИОЭНЕРГИЯ ИЛИ БИОПОЛИМЕРЫ**

Аннотация. В данной работе рассматривается методика анаэробного брожения отходов фруктов и овощей для получения биогаза и органических удобрений. Анализируются показатели эффективности процесса, такие как производство биогаза, энергетическая эффективность, утилизация отходов и применение удобрений. Предоставляются результаты исследования, демонстрирующие преимущества данной технологии в контексте устойчивого управления отходами и использования возобновляемых ресурсов.

Ключевые слова: биогаз, метан, утилизация, отходы, брожение, удобрения, энергоэффективность, урожайность, сельское хозяйство, устойчивость.

*Sadullaev J.M.
assistant
Jizzakh Polytechnic Institute
Republic of Uzbekistan, Jizzakh
Shingisov A.U.
professor
South Kazakhstan State University named after Mukhtar Auevov
Republic of Kazakhstan, Shymkent*

**RESEARCH AND DEVELOPMENT OF INNOVATIVE WAYS TO
RECYCLE WASTE GENERATED FROM PROCESSING FRUITS AND
VEGETABLES, WITH THE AIM OF CONVERTING THEM INTO
VALUABLE PRODUCTS SUCH AS BIOENERGY OR BIOPOLYMERS**

Abstract. This paper discusses the method of anaerobic fermentation of fruit and vegetable waste to produce biogas and organic fertilizers. Process performance indicators such as biogas production, energy efficiency, waste management and fertilizer application are analyzed. Research results are provided demonstrating the benefits of this technology in the context of sustainable waste management and the use of renewable resources.

Key words: biogas, methane, recycling, waste, fermentation, fertilizers, energy efficiency, productivity, agriculture, sustainability.

Введение. Согласно оценкам Организации по продовольствию и сельскому хозяйству (ФАО), почти треть всей производимой пищи в мире ежегодно пропадает, что составляет около 1,3 миллиарда тонн. Большая часть этого пищевого отхода происходит на этапах производства и переработки, в том числе из фруктов и овощей. Это приводит к нерациональному использованию ресурсов, таких как вода, энергия и земельные площади, и оказывает негативное воздействие на окружающую среду из-за образования отходов, выбросов метана и других парниковых газов при их разложении.

Методология. «Методика переработки отходов фруктов и овощей в биоэнергию» Одной из наиболее перспективных методик переработки отходов фруктов и овощей является анаэробное брожение, также известное как биогазовая технология. Этот процесс позволяет преобразовать органические отходы в биогаз, который может быть использован как источник возобновляемой энергии. Биогаз состоит в основном из метана (CH₄) и углекислого газа (CO₂), и его можно использовать для генерации электроэнергии или в качестве топлива для транспортных средств. Процесс начинается с сбора отходов фруктов и овощей, таких как кожура, остатки мякоти, стебли и другие отходы производства. Затем отходы измельчаются до мелких частиц для повышения эффективности брожения. После измельчения отходы помещаются в анаэробный реактор, который поддерживает бескислородную среду. Здесь происходит брожение под действием бактерий, которые разлагают органические вещества и выделяют биогаз. Время, необходимое для брожения, может варьироваться в зависимости от состава отходов и условий процесса, но обычно составляет от нескольких дней до нескольких недель. Полученный биогаз проходит очистку для удаления примесей и повышения его качества. После этого он может быть использован для выработки электроэнергии или тепла, а также в качестве топлива для транспорта.

Результат. Результаты проведенного исследования по методике анаэробного брожения отходов фруктов и овощей показали значительный потенциал для преобразования отходов в биоэнергию и удобрения.

Производство биогаза: в результате анаэробного брожения удалось получить около 200 кубических метров биогаза из одной тонны отходов фруктов и овощей. Биогаз состоял из 60% метана и 40% углекислого газа.

Энергетическая эффективность: Использование биогаза для производства электроэнергии обеспечило общий КПД системы на уровне 75%. Полученная энергия позволила сократить затраты на электроэнергию на 20% по сравнению с обычными источниками энергии.

Утилизация отходов: Исследование продемонстрировало, что около 90% отходов были успешно переработаны в процессе анаэробного брожения. Это позволило значительно снизить объем отходов, направляемых на полигоны.

Производство удобрений: Дигестат, полученный в результате процесса, был использован в качестве органического удобрения и показал эффективность, сопоставимую с традиционными химическими удобрениями. Урожайность повысилась на 15% при использовании дигестата в сельском хозяйстве.

Таблица 1.

Результаты исследования по методике анаэробного брожения отходов фруктов и овощей

Показатели	Результаты
Производство биогаза	200 куб. м/тонна
Состав биогаза	60% метана, 40% CO ₂
Энергетическая эффективность	КПД 75%
Экономия энергии	Сокращение затрат на 20%
Утилизация отходов	Переработано 90% отходов
Производство удобрений	Повышение урожайности на 15%

Заключение. В целом, исследование подтвердило эффективность анаэробного брожения как метода утилизации отходов фруктов и овощей, позволяющего получать биоэнергию и органические удобрения. Эти результаты свидетельствуют о перспективах применения данной технологии для устойчивого управления отходами и получения возобновляемых ресурсов.

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Салибаева Р.Б.
учитель математики

Ангренское городское профессионально-техническое училище №2

ПРИМЕНЕНИЕ МАТЕМАТИКИ В РЕШЕНИИ ЭКОНОМИЧЕСКИХ ЗАДАЧ

Аннотация. Математика является ключевым инструментом в решении экономических задач, позволяющим экономистам проводить анализ, моделирование и прогнозирование в различных областях экономики. В этой статье рассматриваются основные принципы и примеры применения математических методов в экономике, включая теорию игр, эконометрию, оптимизацию, макроэкономическое моделирование и финансовую математику. Мы исследуем, как эти методы помогают анализировать стратегические решения, оценивать экономические данные, оптимизировать использование ресурсов и управлять финансовыми рисками. Особое внимание уделяется роли математических моделей в принятии экономических решений и разработке политик, а также их влиянию на развитие экономики.

Ключевые слова: Математика, экономика, эконометрия, оптимизация, теория игр, финансовая математика.

Salibayeva R.B.
Angren City Vocational School No. 2 – mathematics teacher

APPLICATION OF MATHEMATICS IN SOLVING ECONOMIC PROBLEMS

Abstract. Mathematics is a key tool in solving economic problems, allowing economists to conduct analysis, modeling and forecasting in various areas of the economy. This article examines the basic principles and applications of mathematical methods in economics, including game theory, econometrics, optimization, macroeconomic modeling, and financial mathematics. We explore how these techniques help analyze strategic decisions, evaluate economic data, optimize the use of resources, and manage financial risk. Particular attention is paid to the role of mathematical models in economic decision-making and policy development, as well as their impact on economic development.

Keywords: Mathematics, economics, econometrics, optimization, game theory, financial mathematics.

Понимание экономики и ее сложных систем требует использования различных инструментов, одним из которых является математика. С древних времен до наших дней математика играла ключевую роль в

решении экономических задач, позволяя экономистам и аналитикам проводить точные расчеты, моделировать сложные системы и делать обоснованные прогнозы. В данной статье мы рассмотрим, каким образом математика применяется в экономике, как она помогает решать конкретные задачи, а также ее влияние на развитие экономической теории. Экономика, как наука, всегда опиралась на цифры и данные. Идеи, которые зародились еще в эпоху Древней Греции, со временем эволюционировали в сложные математические модели, способные объяснить и предсказать экономические явления. Сегодня математика пронизывает все аспекты экономики, от микроуровня, включающего отдельных потребителей и фирмы, до макроуровня, где рассматриваются целые экономики и международные торговые системы.

Теория Игр в Экономике. Теория игр – это область математики, которая изучает стратегии принятия решений в условиях неопределенности и конкуренции. В экономике она широко используется для моделирования поведения участников рынка, анализа стратегических решений и изучения динамики конкуренции. Одним из самых известных применений теории игр в экономике является модель "Дилемма заключенного". В этой модели два игрока вынуждены принять решение, основанное на ограниченной информации, и их результат зависит от решений другого игрока. Применительно к экономике, эта модель может иллюстрировать, как компании могут действовать в условиях конкуренции, как регулируются монополии и олигополии, а также как проводятся переговоры. В реальном мире теория игр применяется для анализа стратегических решений компаний, например, при выборе ценовой стратегии, разработке маркетинговых кампаний или принятии решений о слияниях и поглощениях. Используя математические модели, экономисты могут предсказать вероятные исходы различных стратегий и предложить рекомендации для оптимизации поведения на рынке.

Эконометрия: Анализ Данных и Статистический Подход. Эконометрия – это дисциплина, которая объединяет математику и статистику для анализа экономических данных. Эконометристы используют статистические методы для оценки экономических моделей, проверки гипотез и анализа взаимосвязей между различными экономическими переменными. Основным инструментом эконометристов – это регрессионный анализ, который позволяет установить взаимосвязи между зависимой переменной и одной или несколькими независимыми переменными. Например, эконометрист может использовать регрессионный анализ, чтобы исследовать, как уровень образования влияет на уровень дохода, или как изменение процентной ставки влияет на инфляцию. Эконометрика также используется для прогнозирования. С помощью методов временных рядов экономисты могут предсказать будущие тенденции на основе исторических данных. Это особенно важно

для финансовых рынков, где прогнозы могут помочь инвесторам принимать обоснованные решения.

Оптимизация: Поиск Лучших Решений. Оптимизация в экономике – это поиск наилучших решений при наличии ограниченных ресурсов. Методы оптимизации используются в различных областях экономики, от планирования производства до управления портфелями инвестиций. Линейное программирование – один из самых распространенных методов оптимизации, который позволяет находить оптимальные решения в линейных системах. В экономике он применяется, например, для оптимизации производства на предприятиях, где необходимо определить наилучший способ использования ресурсов для максимизации прибыли. Другой метод оптимизации – динамическое программирование. Этот подход применяется в ситуациях, когда решение одной задачи зависит от предыдущих решений. В экономике динамическое программирование используется для анализа инвестиций, выбора оптимальных стратегий в бизнесе и других задач, связанных с последовательностью решений.

Математика в Макроэкономике. Математика также играет важную роль в макроэкономике, где исследуются крупномасштабные экономические процессы, такие как рост ВВП, инфляция, безработица и денежно-кредитная политика. Для анализа макроэкономических процессов используются сложные математические модели, такие как модели общего равновесия. Эти модели помогают правительствам и центральным банкам принимать решения о фискальной и денежной политике. Например, центральные банки используют математические модели для определения оптимальных уровней процентных ставок и управления денежной массой, что в конечном итоге влияет на уровень инфляции и экономический рост. Модели общего равновесия также применяются для анализа международной торговли и влияния глобализации на экономику. Экономисты используют эти модели для изучения воздействия торговых тарифов, соглашений о свободной торговле и других факторов, влияющих на глобальные экономические процессы.

В заключение, математика – это неотъемлемый инструмент для решения экономических задач. Она позволяет экономистам разрабатывать и проверять теории, проводить анализ данных, моделировать сложные системы и принимать обоснованные решения. Благодаря математике, экономика как наука развивается и становится все более точной и предсказуемой, что, в свою очередь, способствует улучшению благосостояния общества.

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Самадқулов М.
иқтисод фанлари бўйича PhD
Тошкент кимё-технология институти Янгиер филиали
Ўзбекистон, Сурдарё

ЎЗБЕКИСТОНДА ИННОВАЦИОН КЛАСТЕРЛАРНИ РИВОЖЛАНТИРИШНИНГ УСТУВОР ЙЎНАЛИШЛАРИ

Аннотация. Иқтисодиётни инновацион тараққий эттиришида, айниқса, иқтисодий ривожланишнинг анъанавий усуллари етарли даражада фойда бермаётган ҳозирги шароитда, “кластер” назариясини амалиётга жорий қилиш энг мақбул йўл ҳисобланади.

Калит сўзлар. Инновацион кластер, давлат-ҳусусий шерикчилиги, саноат кластери, ялпи ички маҳсулот, инфратузилмага инвестициялар, таълим ютуғи, технологик ютуқлар.

Samadkulov M., PhD in Economics
Yangier Branch of Tashkent Chemical Technology Institute
Uzbekistan, Syrdarya

PRIORITY DIRECTIONS OF DEVELOPMENT OF INNOVATION CLUSTERS IN UZBEKISTAN

Abstract. In the innovative development of the economy, especially in the current conditions where the traditional methods of economic development are not sufficiently beneficial, the implementation of the "Cluster" theory is considered to be the most appropriate way.

Key words. Innovation Cluster, public-private partnership, industrial cluster, gross domestic product, infrastructure investment, educational achievement, technological advancement.

КИРИШ.

Ҳар қандай мамлакатда кластерларнинг яратилиши кичик бизнес ва йирик корхоналарнинг инновацион ривожланиши учун кучли туртки беради.

Шу нуқтаи-назардан келиб чиққан ҳолда, ҳозирги мураккаб шароитда республика ижтимоий-иқтисодий тараққиётини жадаллаштириш учун “...кластерлар фаолиятини ҳар томонлама ривожлантириш керак.”

Бизнинг фикримизча, саноатни кластерлаштиришда инновацион ёндашувни амалиётга жорий қилиш, яъни, инновацион кластерларини ташкил қилиш мақсадга мувофиқдир.

Инновацион кластерлар ривожланиши мавжуд саноат компанияларига илмий-тадқиқот натижаларини интенсив равишда жорий

қилиш, йирик корхоналар томонидан қўшилган қиймат занжирига кириш учун янги кичик ва ўрта корхоналар давлат-хусусий шерикчилиги асосида ташкил этиш ҳисобига амалга оширилади.

АСОСИЙ ҚИСМ.

Ўзбекистонда инновацион фаолиятни бошқаришда тармоқ ёндашуvidан фойдаланиш устунлик қилади, бу эса, ўз навбатида, миллий иқтисодиётни инновацион жиҳатдан тўлиқ янгилашга имкон бермайди. Республикада ЯИМнинг фан сиғимкорлиги даражаси ҳануз пастлигича қолмоқда. Шу сабабли мамлакат миқёсида инновацион фаолиятни ташкил этиш ва бошқаришда янги ёндашувларни излаш, шунингдек инновацияларни яратиш, тарқатиш ва тижоратлаштириш борасида қулай муҳит юзага келтириш масалалари долзарб аҳамият касб этади.

Замонавий иқтисодиётда кластерли ёндашув ҳудудлар иқтисодиётини ривожлантириш ва ташкилотларнинг рақобатбардошлик ҳамда инновацион фаоллик даражасини оширишнинг самарали воситаларидан бири ҳисобланади, чунончи, иқтисодий жиҳатдан тараққий этган мамлакатларнинг бу борадаги тажрибаси ҳақиқатдан ҳам, иқтисодиётни инновацион жиҳатдан ривожлантиришда кластерлаштириш амалиётининг ўрни муҳим эканлигидан далолат беради.

Аксарият олимлар таъкидлашича, барча кластерлар у ёки бу даражада инновацион ривожланишга, инновацион жараёни у ёки бу даражада тезлаштиришга ҳисса қўшади ва ҳатто уларнинг баъзилари мазкур вазифани бажаришга ихтисослашганлиги билан ҳам ажралиб туради. Айнан ушбу ғоя инновацион кластерлар концепциясининг асосини ташкил қилади. Инновацион кластерлар инновацияларга мойил бўлиб, бу фирмаларнинг ўз фаолиятларини ташкил этиш ва ривожлантириш, маҳсулот ишлаб чиқариш ва уларни сотиш жараёнида намоён бўлади. Улар иқтисодий субъектларнинг инновацияларни қабул қилишга мойиллигини ошириш, бизнесни оқилона ташкил қилиш, маҳсулдорликни ошириш каби афзалликларини ривожлан-тиришга ёрдам беради.

БМТнинг “Компанияларнинг инновацион самарадорлигини ошириш: сиёсий имкониятлар ва амалий воситалар” ҳисоботида қайд этилишича, инновацион кластер инновацияларни яратишга ҳисса қўшадиган ташкилотлардан иборат таъминотчи ва истеъмолчилар ҳамда таълим муассасалари ўртасидаги яқин алоқалар тизимидан ташкил топган тузилмани ифода этади. Кластер бир-бири ўзаро билан ҳамкорлик қиладиган ва рақобатлашадиган ташкилотларни бирлаштиради ҳамда улар ўртасидаги алоқалар вертикал ва горизонтал тавсифга эга бўлади.

“Кластер” тушунчасини талқин қилиш борасидаги юқорида келтириб ўтилган ёндашувларни умумлаштирган ҳолда, бизнинг фикримизча, инновацион-саноат кластери бу - муайян бир ҳудудда географик жиҳатдан маҳаллийлашган, бир-бирини тўлдирувчи, рақобатдош иқтисодий субъектлар (шу жумладан, таъминотчи, ишлаб чиқарувчи ва

истеъмолчилар) мажмуидир. Бунда кластер субъектлари ўзаро, шунингдек, давлат ва маҳаллий бошқарув органлари билан инновацияларни ёйиш борасида қулай муҳит яратиш, шунингдек, кластер субъектлари, ҳудудлар ва миллий иқтисодиётнинг инновацион фаоллигини ошириш ва рақабатбардошлигини мустаҳкамлаш мақсадида бирлашадилар.

Бизнинг фикримизча, кластернинг 3 тузилмавий унсурларини ажратиб кўрсатади:

ишлаб чиқарувчилар, бир-бирини тўлдирувчи тармоқлар, ресурслар ва хизматлар етказиб берувчилар, сотувчилар, харидорлар ҳамда илмий-маърифий марказни ўз ичига олган “бизнес” унсури (кластернинг “ўзаги”);

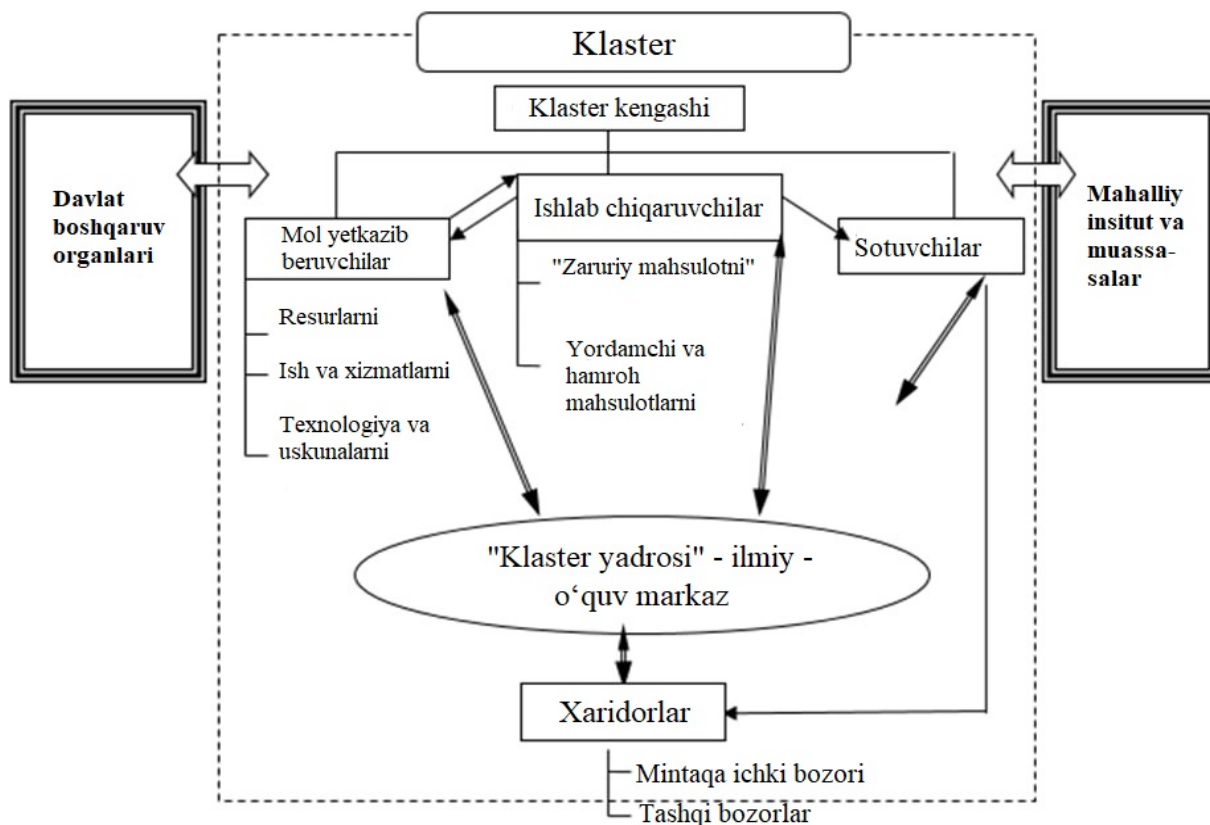
университет, бизнес мактаб, турли хил уюшма, савдо-саноат палатаси ва шу кабиларни ўз ичига олувчи “маҳаллий муассасалар” унсури;

давлат ташкилотлари, шунингдек, маҳаллий давлат ҳокимияти органларини ўз ичига олувчи, “давлат ва ҳудудий бошқарув органлари” унсури.

“Бизнес” марказий субъект ҳисобланади – у кластернинг асосини ташкил қилади. Қолган икки субъект – “давлат ва ҳудудий бошқарув органлари” ва “маҳаллий муассасалар” кластер инфратузилмасини шаклландиришга хизмат қилади.

Инновацион-саноат кластерининг мазмун-моҳияти, амал қилиш тамойиллари ва қонуниятларини тадқиқ қилиш натижалари асосида бизнинг фикримизча, инновацион кластерларни ривожлантириш модели қуйидагича бўлиши мақсадга мувофиқ.

Таклиф этилаётган модел кластернинг таркибий тузилиши ва унинг субъектлари ҳамда инфратузилма унсурлари ўртасидаги алоқаларни аниқлашга, бу эса, ўз навбатида, кластер стратегиясини ишлаб чиқишга имкон беради. Бундан ташқари, ушбу моделдан кластерлашнинг ташкилий ва иқтисодий механизмини шакллантиришда фойдаланиш мумкин.



Инновацион саноат кластери модели

Кластерни яратишдан кўзланган асосий мақсад, муайян бир иқтисодий натижа-рақобатбардош маҳсулот ишлаб чиқаришга эришишдан иборатдир, бу, ўз навбатида, алоҳида олинган ташкилот самарадорлигини оширишга ва умумий тарзда иқтисодий тараққиётнинг тезлашишига олиб келади. Кластер моделини жорий этишнинг асосий вазифаси - тадбиркорларнинг психоло-гиясини ўзгартириш, умумий иқтисодий манфаатлар доирасида барча кластер иштирокчиларининг ҳалол, очиқ ва ўзаро манфаатли ҳамкорлигининг ўзига хос имкониятларини тушуниб етишларига кўмаклашишдан иборатдир.

Бизнинг фикримизча, кластерларнинг вужудга келиши ва динамикаси ўзгаришига таъсир қилувчи омилларни ажратиб олган ҳолда, уларни қуйидагича таснифлаш мақсадга мувофиқ:

- “тадрижий” омилларнинг устунлиги таъсири остида вужудга келган кластерлар;
- “конструктив” омилларнинг устунлиги таъсири остида вужудга келган кластерлар;
- Иккала омил таъсири натижасида вужудга келган кластерлар.

Ушбу тасниф кластернинг пайдо бўлиши ва ривожланиш механизмини яхшироқ тушунишга, унга сезиларли таъсир кўрсатадиган омилларни аниқ-лашга имкон беради, бундан ўз навбатида, кластер стратегиясини ишлаб чиқиш ва кластерлаштиришнинг ташкилий-

иқтисодий механизмини шакл-лантиришда кенг фойдаланиш мумкин.

Амалда, кластерларнинг у ёки бу турга мансублигини ажратиш аксарият ҳолатларда катта қийинчилик туғдиради. Одатда, улар кластерларнинг кўриб чиқилган типларининг ўзига хос комбинациясини акс эттиради. Ҳаётийлик циклининг турли босқичларида ички ва (ёки) ташқи омилларнинг таъсири остида ривожланиш жараёнида кластерлар аввалги жиҳатлари ва компетенцияларини йўқота бориб, уларга хос бўлмаган жиҳатларни кашф этган ҳолда, ўз ички тузилишини ўзгартириши мумкин. Бугунги кунда кластерларни тўлақонли таснифлашга ҳар қачонгидан кўра, катта эҳтиёж мавжуд, зеро, ҳеч бўлмаганда кластерга мансуб ва мансуб бўлмаган тузилмаларни фарқлаш талаб қилинади.

ХУЛОСА

Кластерларни яратишдан кутилаётган иқтисодий самара куйидагилар билан изоҳланади:

– чегара ҳудудларда жойлашган кластер субъектларининг ялпи салоҳиятидан янада самарали фойдаланишга имкон берувчи, савдо-ишлаб чиқариш кооперацияси;

– ишларнинг бир қисмини аниқ фаолиятга ихтисослашган ҳамкорларга ўтказиш йўли билан ишлаб чиқариш базасини модернизациялаш харажат-ларини камайтириш;

– узоқ муддатли ҳамкорлик алоқаларини йўлга қўйиш асосида ишлаб чиқаришни хомашё, материаллар билан таъминлаш жараёнлари самарадорлигини ошириш;

– меҳнат тақсимоти, ихтисослашув, ихтисослашган ташкилотларни жалб қилиш орқали айрим бошқарув функцияларининг самарадорлигини ошириш;

– инвестицион-молиявий кооперациянинг ишончлилигини ошириш.

Умуман олганда, инновацион-саноат кластерларининг ривожланиши муайян бир ижтимоий-иқтисодий самарага эришишга имкон беради. Булар:

- барча кластер иштирокчиларининг молиявий имкониятларини бирлаштириш, ташқаридан инвестицияларни жалб қилиш, грантлар шаклида молиялаштириладиган лойиҳалар танловларида биргаликда иштирок этиш, кредит ресурсларини олиш кафолатларини таъминлаш учун молиявий имко-ниятларни бирлаштириш орқали молиявий ресурсларни жалб қилиш имко-ниятларини кенгайтириш;

- тармоқнинг инновацион салоҳиятини ошириш;

- фан ва таълимнинг кластер ташкилотлари ва ҳокимият идоралари билан ўзаро ҳамкорлигини йўлга қўйиш орқали тадқиқот натижаларини ҳудудий саноат сиёсатига жорий этиш жараёнларини тезлаштириш;

- синергия самараси ва сифат, логистика, ахборот технологиялари борасидаги ёндашувларни бир хиллаштириш ҳисобига харажатларни камай-тириш ва фан сиғимли маҳсулотлар сифатини яхшилаш;

- таъминотчилар билан ишлаш самарадорлигини ошириш;

- янги ташкилотларни рағбатлантириш;
- юқори қўшилган қийматли маҳсулотлар экспортини кўпайтириш, импорт ўрнини босишни кенгайтириш;
- маҳаллий ҳокимият ва маҳаллий ўзини ўзи бошқариш даражасида кластер иштирокчиларининг ўз манфаатларини янада самаралироқ ҳимоя қила олишларига эришиш;
- худудда бандлик даражасини ошириш;
- кластер иштирокчилари ўртасида мутлақо янги тартибдаги одоб-ахлоқ, ишонч ва ҳамкорликка асосланган муносабатларнинг пайдо бўлиши, янги фикрлаш тарзини шаклланиши;
- кластер таркибига кирувчи корхона ва ташкилотларнинг самарадорлиги ва рақобатбардошлигини ошириш;
- худуднинг рақобатбардошлигини ошириш ва иқтисодий равнақини таъминлаш.

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Учредители: Национальный университет Узбекистана им. Мирзо
Улугбека, (3), 70-76.

РАЗВИТИЕ СОЦИАЛЬНОЙ ИНФРАСТРУКТУРЫ СЛУЖИТ ПОВЫШЕНИЮ БЛАГОСОСТОЯНИЯ НАСЕЛЕНИЯ

Аннотация. Статья посвящается мерам развития социальной инфраструктуры для повышения благосостояния населения. Важно знать, что увеличение видов инфраструктурных услуг и развитие социальной инфраструктуры служат повышению благосостояния населения. В социальной политике государства особенно уделяется внимание на разработки инновационных стратегий управления, направленных на повышение экономической и социальной эффективности.

Ключевые слова: социальная сфера, социальная инфраструктура, благосостояние населения, социальная политика.

Samieva G.T.

associate professor

Department of Innovative Economics

Karshi Engineering and Economic Institute

DEVELOPMENT OF SOCIAL INFRASTRUCTURE SERVES INCREASED WELL-BEING OF THE POPULATION

Annotation. The article is devoted to measures for the development of social infrastructure to improve the well-being of the population. It is important to know that increasing the types of infrastructure services and developing social infrastructure serve to improve the well-being of the population. In the social policy of the state, special attention is paid to the development of innovative management strategies aimed at increasing economic and social efficiency.

Key words: social sphere, social infrastructure, welfare of the population, social policy.

В эпоху стремительной урбанизации в мире, наряду с развитием инфраструктуры, вопрос повышения благосостояния сельского населения входит в число самых высоких целей. Увеличение видов инфраструктурных услуг и развитие социальной инфраструктуры в качестве социальной политики государства особое внимание уделяется разработке инновационных стратегий управления, направленных на повышение экономической и социальной эффективности, совершенствованию системы

подготовки квалифицированных кадров, особенно на качественное образование, здравоохранения.

По данным международных организаций, сегодня 1/3 государственного бюджета тратится на развитие социальной сферы в зарубежных странах. США, Япония, Южная Корея, Китай и Европа лидируют в мире по управлению социальной инфраструктурой, ее целевым направлениям развития и содержанию.

В решении глобальных экономических задач важна организация и совершенствование организационно-управленческой структуры социальной инфраструктуры на инновационной основе. В частности, в государственной социальной политике проводятся системные реформы по развитию механизмов эффективного решения проблем сельского населения в сфере образовательной политики, жилищного обеспечения, бытового обслуживания и здравоохранения. В частности, на основании Постановления Президента Республики Узбекистан № PQ-465 от 30.12.2022 «О мерах по развитию социальной и производственной инфраструктуры Республики Узбекистан в 2023-2025 годах» и далее развитие производственной инфраструктуры, а также реализация целевых задач по повышению уровня жизни населения и созданию благоприятной инвестиционной среды для предпринимателей.

Социальные инфраструктуры и вопросы повышения благосостояния населения посредством их развития обсуждаются в исследованиях таких зарубежных учёных, как Ю.Шумпетер, Д.Нортон, П.Друкер, П.Довлинг, М.Портер, А.Райзберг, Р.Каплан, а также в исследованиях учёных стран СНГ А.И.Гаврилова, Н.Н.Некрасова, А.Г.Синельникова, Ю.Т.Тощенко, Т.Н.Арбузовой, С.Г.Важенина, А.Г.Гранберга, А.Д.Ерёменко. Экономисты из Узбекистана С.Гулямов, Н.Юлдашев, Б.Гойибназаров, А.Расулов, Ш.Шодмонов, Ш.Зайнутдинов, А.Шарипов, С.Хамраева, Ш.Юлдашева провели исследования по теоретическим и практическим аспектам развития социальной инфраструктуры.

Создание инфраструктуры неразрывно связано с материальным производством, а ее развитие создает новые виды производства и деятельности в обслуживающих и интегрированных отраслях. Повышение производительности общественного труда в сфере социального производства высвобождает в обществе большой объем ресурсов для оказания услуг населению. Создание инфраструктуры означает развитие производительных сил в обществе, в результате чего внутриэкономическая общность отраслей внутри него определяется выполнением определенных задач.

В структуру социальной инфраструктуры входят:

- Жилищно-коммунальное хозяйство;
- Здравоохранение;

- Образование (обучение и подготовка, переподготовка и повышение квалификации профессиональных кадров)
- Услуги связи и информации;
- Бытовые услуги;
- Социальная поддержка населения;
- Наука и культура;
- Общественные организации;
- Спортивно-оздоровительные и развлекательные объекты;
- Перевозка людей (пассажирский транспорт);
- Охрана и защита общественного порядка;
- Социальное обеспечение и т.д.

Социальная инфраструктура включает в себя социально-бытовую и социально-духовную инфраструктуры. Совершенствование механизма развития социальной инфраструктуры, особенно сельского населения, является одной из задач, которую должна решить социальная политика нашей страны. Объекты социальной инфраструктуры в процессе осуществления своей деятельности включают оказание услуг, а также производство товаров. При этом выдвигаются цели повышения уровня жизни населения и воспроизводства рабочей силы. Для оценки уровня развития социальной инфраструктуры в Республике Узбекистан необходимо учитывать основные задачи социальной политики, направленные на улучшение качества жизни населения, повышение его благосостояния и долголетия, формирование и восстановление здоровое, творчески активное поколение.

В частности, достижение таких положительных результатов, как обеспечение населения качественным жильем, повышение уровня и качества развития социальной инфраструктуры, создание культурной сферы жизнедеятельности человека, улучшение экологических условий жизни и труда, повышение производительности труда, создание гарантий социального обеспечения. защита молодежи и пенсионеров выступают систематическим показателем этой области.

Деятельность здравоохранения, образования, жилищно-коммунального хозяйства, благоустройства, занятости и многих других субъектов сферы услуг, направленная на повышение уровня жизни населения, нашла свое воплощение в исследуемой структуре региональной социальной инфраструктуры. Все они в первую очередь отражены в нормативно-правовых документах, издаваемых правительством нашей страны, особенно в стратегиях.

Социальная политика – это политика, отражающая приоритетные направления государственной политики в области образования, культуры, здравоохранения, пенсионного обеспечения, жилищно-коммунального хозяйства, физического воспитания и спорта, бытовой и социальной

защиты, гарантирующая совокупность всех условий жизнедеятельности человека, материальные и духовные блага.

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Сатторов Т.Т.
ассистент
кафедра «Бухгалтерский учет»
Самаркандский институт экономики и сервиса

ФОРМАЦЕВТИКА ТАРМОГИ СУБЪЕКТЛАРИДА ДОРИ-ДАРМОН ВОСИТАЛАРИНИНГ НАЗАРИЙ АСОСЛАРИ

Annotatsiya. Mазкур мақолада дори-дармон воситалари назарий асослари ва уларни ишлаб – чиқариш, ҳамда уларни ишлаб – чиқаришдаги камчиликлар ва бартараф этиш йулларини тўғрисида қисқача тўхталиб ўтилган.

Калит сўзлар: Формацевтика, дори-дармон воситалари, ишлаб – чиқариш, технологиялар, 2022, 2023 ва 2024 йилларда, ишлаш, етказиб бериш, сақлаш, ташиш ва реализация қилиш.

Sattorov T.T.
assistant
Department of Accounting
Samarkand Institute of Economics and Service

THEORETICAL BASIS OF DRUGS IN SUBJECTS OF THE PHARMACEUTICAL NETWORK

Abstract. This article briefly discusses the theoretical basis of medicines and their production, as well as the shortcomings in their production and ways to eliminate them.

Keywords: pharmaceuticals, pharmaceuticals, production, technologies, in 2022, 2023 and 2024, operation, delivery, storage, transportation and realization.

Ўзбекистон Республикаси Президентининг “Ўзбекистон Республикасининг «2022 йил учун Ўзбекистон Республикасининг давлат бюджети тўғрисида»ги Қонуни ижросини таъминлаш чора-тадбирлари тўғрисида”ги Қарорида келтирилган “2022 – 2024 йиллар учун биринчи даражали бюджет маблағларини тақсимловчиларнинг бюджет харажатлари ва ривожлантириш дастурларининг мақсадли индикаторлари”да “Қишлоқ хўжалигини ислоҳ қилиш, хусусан соҳада давлат бошқаруви тизимини такомиллаштириш, бозор муносабатларини кенг жорий қилиш, қишлоқ хўжалиги маҳсулотларини етиштирувчи, қайта ишловчи ва сотувчи субъектлар ўртасидаги муносабатларнинг ҳуқуқий асосини мустаҳкамлаш, соҳага инвестицияларни жалб қилиш, ресурс тежамкор технологияларни жорий этиш ҳамда қишлоқ хўжалиги маҳсулотлари ишлаб чиқарувчиларни

замонавий техникалар билан таъминлаш” бўйича стратегик мақсад белгилаб берилган. Ушбу стратегик мақсад бўйича қишлоқ хўжалиги ва дори-дармон воситалари экспорти ҳажмининг ошиши бўйича прогноз 2022, 2023 ва 2024 йилларда мос равишда 1,4, 1,6 ва 2,3 млрд АҚШ долларига етказиш вазифаси белгиланган²¹⁹.

Мамлакатимиз корхоналарида бу каби долзарб муаммо ва вазифаларни ҳал қилиш, бугунги кунда, тайёр маҳсулотлар ҳисобининг нафақат амалий, балки назарий масалаларини ҳам такомиллаштиришга эҳтиёж сезади.

Тадқиқот давомида норматив-ҳуқуқий ҳужжатлар, халқаро ва миллий стандартлар ҳамда хорижий ва маҳаллий адабиётлар ўрганиб чиқилганда тайёр маҳсулотлар, жумладан дори-дармон воситаларимаҳсулотлари атамаларига турлича ёндашувлар қилиниб таъриф ва тавсифлар берилганлигига гувоҳ бўлиш мумкин.

Ўзбекистон Республикасининг “Дори-дармон воситалари маҳсулотининг сифати ва хавфсизлиги тўғрисида”ги Қонунида дори-дармон воситалари маҳсулотларига доир қуйидаги таърифлар келтирилган:

озик-овқатлар – дори-дармон воситалари хом ашёсидан тайёрланган ҳамда натурал ёки қайта ишланган ҳолида истеъмол қилинадиган маҳсулотлар;

дори-дармон воситаларимаҳсулоти – дори-дармон воситаларихом ашёси, (шу жумладан этил спирти), озиқ-овқатлар ва уларнинг таркибий қисмлари, дори-дармон воситаларихом ашёси ва озиқ-овқатларга тегиб турадиган моддалар, материаллар, ёрдамчи ва қадоклаш материаллари ҳамда улардан тайёрланган буюмлар бирга;

болаларбоп дори-дармон воситалари – болалар организмнинг (уч ёшгача) физиологик хусусиятларига жавоб берадиган махсус дори-дармон воситалари;

дори-дармон воситалари маҳсулоти муомаласи – дори-дармон воситаларимаҳсулотини ишлаб чиқариш, тайёрлаш, харид қилиш, қайта ишлаш, етказиб бериш, сақлаш, ташиш ва реализация қилиш билан боғлиқ фаолият;

дори-дармон воситалари сифати – дори-дармон воситалари истеъмол хоссаларини белгилаб берадиган ва унинг одамлар ҳаёти ва соғлиғи учун хавфсизлигини таъминлайдиган мезонлар мажмуи;

дори-дармон воситалари хом ашёси – озиқ-овқатлар ишлаб чиқариш учун фойдаланиладиган ўсимлик, ҳайвонот, микробиология, шунингдек минераллар объектлари, сув.²²⁰

²¹⁹ Ўзбекистон Республикаси Президентининг “Ўзбекистон Республикасининг «2022 йил учун Ўзбекистон Республикасининг давлат бюджети тўғрисида»ги Қонуни ижросини таъминлаш чора-тадбирлари тўғрисида”ги Қарори. 2021 йил 30 декабрь. ПҚ-73.

²²⁰ Ўзбекистон Республикасининг “Озиқ-овқат маҳсулотининг сифати ва хавфсизлиги тўғрисида”ги Қонуни. 1997 йил 30 август, 483-И сон.

2-сон (IAS) “Захиралар” номли бухгалтерия ҳисобининг халқаро стандартида товар-моддий захиралар атамасига қуйидагича таъриф келтирилган:

“Товар-моддий захиралар – бу одатдаги фаолият доирасида сотиш учун мўлжалланган, бундай сотиш учун ишлаб чиқариш жараёнида бўлган, ёки ишлаб чиқариш жараёнида ёки хизматлар кўрсатилишида фойдаланилиши кўзланган хом ашё ва материаллар кўринишидаги активлар”²²¹.

Олиб борилган тадқиқотлар бир қатор хорижий олимларнинг ҳам бу борадаги фикр ва мулоҳазаларини ҳамда берган таърифларини ўрганиб чиқишни тақозо этди.

Россиялик олим С.Н.Поленованинг таъкидлашича, “Тайёр маҳсулот – бу корхонада ишлаб чиқариш жараёни тўлиқ тугалланган, стандарт талабларига ва техник шартларига жавоб берадиган, техник назорат хизмати томонидан қабул қилинган, қабул қилиш-топшириш ҳужжатлари билан расмийлаштирилган ва тайёр маҳсулотлар омборига топширилган маҳсулот”²²².

Ўзбекистон Республикаси 4-сон бухгалтерия ҳисобининг миллий стандартида қуйидагича таърифлар келтирилган:

Товар-моддий захиралар – фаолият юритиш жараёнида кейинчалик сотиш мақсадида сақлаб туриладиган ва ишлаб чиқариш жараёнида бўлган, шунингдек маҳсулот ишлаб чиқариш, ишларни бажариш ёки хизматлар кўрсатиш жараёнида ёхуд маъмурий ва ижтимоий-маданий вазифаларни амалга ошириш учун фойдаланиладиган моддий активлар. Ташкилотда тайёрланган тайёр маҳсулот (реализация қилиш учун мўлжалланган ва шартномада ёки қонунчилик ҳужжатларида белгиланган ҳолларда бошқа ҳужжатларнинг талабларида назарда тутилган техник ва сифат тавсифларига мувофиқ келадиган ишлов берилиши (бутланиши) тугалланган актив).²²³

Маҳсулотлар, шу жумладан тайёр маҳсулотлар бўйича тадқиқот ишлари олиб борилганда, албатта мамлакатимиз олимларининг илмий изланишларини ҳам алоҳида ҳисобга олишимиз зарур.

Мамлакатимизнинг иқтисодчи олимларидан К.С.Исмайлов ва А.Б.Утемуратовларнинг фикрича, “Тайёр маҳсулот - бу ишлаб чиқариш жараёнининг натижаси. Ишлаб чиқариш корхоналарида меҳнат маҳсулотига ҳамма ишлаб чиқарилган тайёр маҳсулот киради”²²⁴.

²²¹2-сон БҲХС (IAS) “Захиралар (Inventories)”. <https://www.ifrs.org/content/dam/ifrs/publications/pdf-standards/english/2022/issued/part-a/ias-2-inventories.pdf>

²²²Поленова С.Н. Учёт готовой продукции: оценка, выпуск из производства, продажа // Проблемы учёта. 2007. № 23 (215).

²²³ 4-сон БҲМС “Товар моддий захиралар” // АВ томонидан 30.06.2020 й. 3259-сон билан рўйхатга олинган. <https://lex.uz/docs/4890446>

²²⁴ Исмайлов К.С., Утемуратов А.Б. Молиявий ҳисоб. Маъруза матни. -Т.: Иқтисод-молия. 2011. -356 б.

Тадқиқотлар натижаси турли ахборот манбаларида “маҳсулотлар”, “тайёр маҳсулотлар” тушунчаларига берилган таъриф ва тавсифларни ҳам ўрганиб чиқишни тақозо этди.

Интернет манбаларида соҳага оид луғатларда ушбу категорияларга оид қуйидаги таъриф келтирилган:

Маҳсулот – иқтисодий фаолиятнинг ашёлар ва хизматларда мужассам этилган натижаси. Унинг моддий-буюм шакли моддий маҳсулот кўринишига эга.²²⁵

Тайёр маҳсулот (Finished Goods) – ишлаб чиқариш жараёнидан ўтган ёки қайта сотиш мақсадида сотиб олинган ҳамда компаниянинг эгалигида бўлган, бироқ ҳали сотилмаган товарлар.²²⁶ Ушбу таърифда тайёр маҳсулот, вақтинча корхонанинг тасарруфида бўлган ва сотишга тайёр ҳолатда турган маҳсулот, деб ёндашилган.

Тайёр маҳсулотлар (Finished Goods) – ишлаб чиқариш корхоналарига хос бўлган инвентар тоифаси. Улар ишлаб чиқариш жараёнини тугатган, лекин ҳали сотилмаган ёки сотувчиларга тарқатилмаган маҳсулотдир.²²⁷

Тайёр маҳсулотлар – бу технологик жараёнларнинг барча босқичларини ўтган ва белгиланган талабларга (буюртмачи, давлат стандартлари, техник шартлар) жавоб берадиган маҳсулотлар. У турлари, навлари ва сақлаш жойлари бўйича реал ва таннарх кўрсаткичлари бўйича ҳисобга олинади. Қабул қилинган ҳисоб сиёсатига қараб, тайёр маҳсулотлар ҳақиқий ишлаб чиқариш таннархида ёки ҳисоб-китоб баҳосида ҳисобга олиниши мумкин.²²⁸

Тайёр маҳсулот – корхоналарда ишлаб чиқариш жараёнининг пировард маҳсулоти. Технологик ишлов беришнинг барча босқичларидан утган, тасдиқланган стандартлар ва техник шартларга мувофиқ келадиган (унинг сифатини тасдиқлайдиган сертификат ёки бошқа хужжат билан таъминланган), техник назорат булими қабул қилган ва оморга топширилган ёки харидорга юклаб жунатилган маҳсулот тайёр маҳсулот деб ҳисобланади.²²⁹

Тайёр маҳсулот (Finished goods) - бу ишлаб чиқаришнинг тўлиқ цикли давомида ишлаб чиқарилган ёки тайёр ҳолатда сотиб олинган, лекин харидорларга ҳали сотилмаган маҳсулот ёки товарлар.²³⁰

Тайёр маҳсулотлар – қайта ишлаш йўли билан тўлиқ тайёр бўлган, амалдаги стандартлар ва техник шартларга мос келадиган, ташкилот ва буюртмачи (харидор) оморига қабул қилинган маҳсулотлар ва ярим тайёр маҳсулотлар.²³¹

²²⁵ <https://qomus.info/encyclopedia/cat-m/mahsulot-uz/>

²²⁶ <https://www.wikiaccounting.com/accounting-finished-good/>

²²⁷ <https://www.indeed.com/career-advice/career-development/finished-goods>

²²⁸ https://buxgalter.uz/publish/doc/text146642_uchet_gotovoy_produkcii

²²⁹ <http://hozir.org/tajer-masulot-isobi-tajer-mahsulot.html>

²³⁰ <https://www.audit-it.ru/ifrs/terms/items/finished-goods.html>

²³¹ https://www.audit-it.ru/terms/accounting/gotovaya_produktsiya.html

Тайёр маҳсулот (ТМ) – бу товар қайсики, компания томонидан келгусида сотиш мақсадида ишлаб чиқарилади.²³²

Компания ёки яқка тартибдаги тадбиркор бозорда нима билан чиқса тайёр маҳсулот дейилади. Унга нафақат товар ёки маҳсулот, балки хизмат, иш ва ҳуқуқлар ҳам таълуқлидир. Тадбиркор тайёр маҳсулотлар ишлаб чиқариш ҳисобини юритмасдан туриб, ўзининг бизнесини назорат ва самарали бошқара олмайди.²³³

Юқорида келтирилган хорижий ва маҳаллий олимлар томонидан берилган ҳамда халқаро ва миллий стандартлар, шунингдек ахборот манбаларида келтирилган таърифлар муҳим илмий амалий аҳамият касб этиб, тайёр маҳсулотларнинг муҳим жабҳаларини очиб беради. Лекин, ушбу таърифлардан кўриниб турибдики, маҳсулотлар, шу жумладан тайёр маҳсулотларга доир уларнинг барча хусусиятларини ўзида мужассамлаштирган ягона таъриф мавжуд эмас. Уларда маҳсулот ва тайёр маҳсулотларнинг барча жиҳатларини ўзида акс эттирадиган тавсифлар келтирилган, деб бўлмайди.

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²³² <https://www.b-kontur.ru/enquiry/911-uchet-gotovoy-produkcii-v-buhguchete>

Сатторов Т.Т.
ассистент
кафедра «Бухгалтерский учет»
Самаркандский институт экономики и сервиса

ДОРИ-ДАРМОН ВОСИТАЛАРИ БУХГАЛТЕРИЯ ҲИСОБИ ТАШКИЛ ЭТИЛИШИ ҲАМДА ВАЗИФАЛАРИ, ҲИСОБ СИЁСАТИНИ ИШЛАБ ЧИҚИШДА ДОЛЗАРЪ МАСАЛАЛАР

Annotatsiya. Ушбу мақолада фармацевтика саноати корхоналарда ишлаб чиқаришни самарали ташкил этиши ва улар орқали корхоналарнинг ҳисоб тизимида ишлаб чиқариш босқичлари келтирилди. Шунингдек, мақолада дори-дармон ишлаб чиқарувчи корхоналарда ҳисоб сиёсатининг намунавий шакли ишлаб чиқилди бу ўз навбатида таннарх харажатларини назорат қилиш соф фойда кўрсаткичларини ошириш ахборотлардан фойдаланиш корхоналарни иқтисодий самарадорлигини ошириш бўйича хулоса ватавсиялар келтирилган

Калит сўзлар: ҳисоб сиёсати, тармоқ, ишлаб чиқариш, асосий ишлаб чиқариш, дори-дармон воситалари, молиявий ҳисоботлар.

Sattorov T.T.
assistant
Department of Accounting
Samarkand Institute of Economics and Service

URGENT ISSUES IN THE ORGANIZATION AND TASKS OF DRUG ACCOUNTING, DEVELOPMENT OF ACCOUNTING POLICIES

Abstract. In this article, the stages of efficient organization of production in pharmaceutical industry enterprises and through them the stages of production in the accounting system of enterprises were presented. Also, in the article, a model form of accounting policy was developed in drug manufacturing enterprises, which, in turn, includes cost control, increasing net profit indicators, use of information, and recommendations on increasing the economic efficiency of enterprises.

Key words: accounting policy, industry, production, main production, pharmaceuticals, financial statements.

Дунё миқёсида ишлаб чиқариш ва савдо фаолиятининг ўрни бекиёс Жаҳондаги бизнес субъектларининг асосий мақсади максимал даражада фойда олишдир.

Ўзбекистон Республикаси Президентининг 2023-й 11-сентябрдаги ПФ -58-сон “Ўзбекистон-2030 стратегияси тўғрисида”ги Фармонида

фармацевтика соҳасида дори воситаларига эҳтиёжни 70 фоизга ички ишлаб чиқарувчилар ҳисобига қоплаш²³⁴ Фармацевтика саноатини янада жадал ривожлантиришга ундайди. Жаҳонда глобал рақобатнинг кучайиши шароитида корхоналарда компанияларда ишлаб чиқариш ва сотиш ҳисобини такомиллаштиришга оид кўплаб илмий-тадқиқот ишлари амалга оширилмоқда. Кейинги йилларда мамлакатларда МҲХС жорий қилиш орқали Халқаро стандартларга ўтаётган мамлакатларда ушбу стандартлар қоидаларни қўллашда маълум муаммолар юзага келмоқда. Айниқса корхона жорий активларини захираларини ҳаққоний баҳолаш, фаол бозорда ҳаққоний баҳони шакллантириш, молиявий инструменларни баҳолаш ва уларнинг молиявий натижаларга таъсири аниқлашда услубий тартиб-қоидалар етарли эмас. Ушбу муаммолар МҲХСларини ривожланаётган мамлакатларда фаол жорий қилишда тўсқинлик қилмоқда.

Бугунги кунда, мамлакатимизда фаолият кўрсатаётган фармацевтика саноати корхоналарининг фаолияти етарли даражада ривожланган деб бшлмайди, аҳолининг ушбу маҳсулотларга бўлган эҳтиёжини тўлиқроқ қондириш мақсадида ишлаб чиқариш корхоналарига етарлича шар-шароитлар ва қулай имкониятлар очиб берилишини таққазо этади. Шундай бўлсада, ушбу тармоқ корхоналарида ишлаб чиқариш жараёнларини ташкил этиш, маҳсулот таннархини аниқлаш, уларни ҳисоб ва ҳисоботда акс эттириш бўйича турли хил ёндашувлар мавжуд бўлиб, ушбу тартиб-қоидалар корхонанинг ҳисоб сиёсатида акс эттирилиши лозим. Бугунги кунда, фармацевтика саноати корхоналарида ҳисоб сиёсатини ишлаб чиқишда ишлаб чиқариш жараёнларини тўғри ташкил этиш, бевосита ва билвосита харажатларни маҳсулот таннархига тўғри олиб бориш, уларни ҳисоб ва молиявий ҳисобот шаклларида шаффоф акс эттириш бўйича услубий тартиблар ишлаб чиқиш долзарб вазифалардан ҳисобланади.

Даставвал, “Ҳисоб сиёсати” ўзи нима, меъёрий-ҳуқуқий ҳужжатлар ва иқтисодий адабиётларда у бўйича қандай таъриф ва тавсифлар мавжуд, корхоналарда бухгалтерия ҳисобини ташкил этишда унинг аҳамияти қай даражада буни қуйидаги олимлар томонидан ва халқаро стнадартларда келтирилган таърифлардан билишимиз мумкин бўлади.

Молиявий ҳисоботнинг халқаро стандартларида “Ҳисоб сиёсати” атамасига қуйидагича таъриф берилган: “Ҳисоб сиёсати – бу тадбиркорлик субъекти томонидан молиявий ҳисоботларни тайёрлаш ва тақдим этишда қўлланиладиган муайян принциплар, усуллар, одатлар, қоидалар ва амалиётлар”²³⁵.

Халқаро стандартда берилган ушбу таърифдан кўриш мумкинки, хўжалик юритувчи субъектлар томонидан ишлаб чиқиладиган ушбу ҳужжатдан асосий мақсад бу молиявий ҳисоботларни тайёрлаш ва уларни тақдим этишга қўмаклашиш бўлиб ҳисобланади.

²³⁴ “Ўзбекистон-2030” Стратегияси тўғрисидаги 11.09.2023й ПФ-158-сон <https://lex.uz/ru/docs/6600413>

²³⁵ 8-сон БҲХС (IAS) “Ҳисоб сиёсати, ҳисоб баҳоларидаги ўзгаришлар ва хатолар”.

1-сон “Ҳисоб сиёсати ва молиявий ҳисобот” БҲМСда эса, қуйидагича тавсифланган: “Ҳисоб сиёсати деганда, хўжалик юритувчи субъектнинг раҳбари бухгалтерия ҳисобини юритиш ва молиявий ҳисобот тузиш учун қабул қиладиган усулларнинг йиғмаси тушунилади, молиявий ҳисобот шу усулларга мувофиқ ва уларнинг қоидалари ва асосларига мувофиқ равишда тузилади”²³⁶.

Республикамиз иқтисодчи олимларидан профессор К.Б.Уразов ва М.Э.Пўлатовлар²³⁷ томонидан ҳисоб сиёсатига қуйидагича таъриф берилган: “Ҳисоб сиёсати – корхона раҳбари томонидан бухгалтерия ҳисобини юритиш ва молиявий ҳисоботни тузиш бўйича қабул қилинган тамойиллар ва тартиблар мажмуаси”. Олимлар томонидан берилган ушбу таърифда ҳисоб сиёсатининг корхонанинг бухгалтерия ҳисобини юритиш бўйича вазифаси ҳисобга олинган бўлсада, бироқ ҳисоб сиёсатининг хўжалик юритувчи субъектларда бухгалтерия ҳисобини ташкил этиш бўйича вазифаси ҳисобга олинмаган.

“Ҳисоб сиёсати деганда, бухгалтерия ҳисоби субъекти раҳбари томонидан бухгалтерия ҳисоби ва ҳисоботини ташкил этишда йўл харитаси, шунингдек молиявий ҳисоботни тузиш ва тақдим этиш бўйича қабул қилинган усуллар ва принципларга тўлиқ амал қилган ҳолда ўзининг ҳисоб тизимини белгилаш тушунилади”.

Олиб борилган тадқиқотлар давомида Республикамизда фаолият юритиб келаётган фармацевтика саноати корхоналарида ҳисоб сиёсати ва унда ёритиладиган ахборотлар билан танишиб чиқдик.

Фармацевтика саноати корхоналарида ҳисоб сиёсати корхона раҳбарининг буйруғи асосида ҳар бир ҳисобот йилининг бошида ишлаб чиқилади ва тасдиқланади. Ушбу жараён, яъни корхона раҳбарининг тегишли ташкилий-фармойиш ҳужжатлари бўйича расмийлаштирилиши 1-сон БҲМСнинг 55-бандида кўзда тутилган бўлсада, бироқ ушбу банднинг иккинчи хатбошисида ушбу ҳужжат расмийлаштирилган йилдан кейинги йилнинг 1 январидан бошлаб қўлланилиши ҳамда йил давомида ўзгартирилишига йўл қўйилмаслиги (56-бандида кўрсатилган сабаблардан ташқари) кўрсатилган. Демак, бизнинг фикримизча, бухгалтерия ҳисоби миллий стандартларида келтирилган ушбу жиҳатлар айрим фармацевтика саноати корхоналарида ҳисоб сиёсатини тузишда ҳисобга олинмаган.

фармацевтика саноати корхоналарида бухгалтерия ҳисобини юритиш тартиби ҳисоб сиёсатида келтирилган бўлиб, ушбу корхоналарининг барчаси автоматлаштирилган дастурларда, жумладан “1С: Предприятие” дастурининг турли хил версиялари ёрдамида ўзларининг ҳисоб ва ҳисоботларини юритадилар.

²³⁶ 1-сон БҲМС “Ҳисоб сиёсати ва молиявий ҳисобот” // АВ томонидан 14.08.1998 й. 474-сон билан рўйхатга олинган.

²³⁷ Уразов К.Б., Пўлатов М.Э. Бухгалтерия ҳисоби. Дарслик. –Т.: “Fan va texnologiyalar nashriyot-matbaa uyi” -2021, 560 бет.

Юқоридаги тадқиқот натижаларидан кўриш мумкинки, бугунги кунда, мамлакатимизда фаолият кўрсатаётган турли мулкчилик шаклидаги фармацевтика маҳсулотлари ишлаб чиқариш фаолияти билан шуғулланаётган корхоналар томонидан ишлаб чиқиладиган ҳисоб сиёсатини уларнинг ишлаб чиқариш жараёнлари хусусиятларидан келиб чиққан ҳолда такомиллаштиришнинг зарурияти мавжуд. Шу боис, тадқиқот ишимизда, дори-дармон воситаларини ишлаб чиқувчи корхоналарда маҳсулотлари ҳисобини юритиш бўйича, халқаро стандартлар талабларига жавоб берадиган “фармацевтика саноати корхоналарида бухгалтерия ҳисобини юритиш бўйича Ҳисоб сиёсати” ишлаб чиқишни лозим, деб топдик.

Ушбу ҳисоб сиёсатини қуйидаги қисмларга ажратган ҳолда, ахборотларнинг ёритилишини тавсия этдик:

I блок. Умумий тавсифи.

1-қисм. Фармацевтика саноати корхонасининг қайси ишлаб чиқариш тармоғига киришини белгилаб олиш:

- ❖ дори-дармон воситаларини чиқариш тармоқлари;
- ❖ яроқлилиқ муддати яқинлашган маҳсулотларини қайта ишлаб чиқариш тармоқлари.

2-қисм. Корхонада ишлаб чиқариладиган дори-дармон воситаларининг турларини аниқлаш:

- ❖ таблетка дори воситалари ишлаб чиқариш тармоқлари маҳсулотлари;
- ❖ дори-дармон маҳсулотларини қайта ишлаб чиқариш тармоқлари маҳсулотлари.

3-қисм. Ишлаб чиқариш технологиясининг қайси хом ашё турларини ишлаб чиқаришга мўлжалланганлигини кўрсатиш:

- ❖ полипропилен гранула хом ашёси;
- ❖ доривор ўсимлик хом-ашёлари;
- ❖ табиий ва кимёвий моддалар;
- ❖ бошқалар.

II блок. Ишлаб чиқариш тузилмаси.

1-қисм. Ишлаб чиқариш бўлимлари ва уларда ишлаб чиқариладиган дори-дармон воситаларининг турлари:

- ❖ асосий ишлаб чиқариш ин-балк бўлими – таблеткалар турли-хил,
- ❖ преформа –преформа ишлаб чиқариш;
- ❖ ички қисмларни ишлаб чиқариш бўлими – еврокалпачики
- ❖ Навестка бўлими – флакон учун навестка;
- ❖ қадоқлаш бўлими – қадоқланган дори-дармон воситалари.

2-қисм. Корхонанинг ёрдамчи ишлаб чиқариш бўлимларининг таркибини аниқлаш:

- ❖ групповая этикетка;
- ❖ гранула чиқиндилари;

3-қисм. Умумишлаб чиқариш бўлимларининг таркибини аниқлаш:

- ❖ таъминот бўлими;
- ❖ иссиқлик таъминоти бўлими;
- ❖ ёнғинга қарши курашиш бўлими;
- ❖ қоровулхона;
- ❖ тозалик бўйича бўлим;
- ❖ бошқалар.

III блок. Ишлаб чиқариш жараёнларини баҳолаш.

1-қисм. Товар-моддий захираларини баҳолаш усуллари:

- ❖ ФИФО;
- ❖ АВЭКО.

2-қисм. Умумишлаб чиқариш харажатларини тақсимлаш усуллари:

- ❖ ишлаб чиқариш ҳажмига нисбатан;
- ❖ ишлаб чиқаришнинг режали таннархига нисбатан;
- ❖ ходимларнинг иш ҳақиға нисбатан;
- ❖ хом ашё ва материал харажатларига нисбатан;
- ❖ олинган даромадга нисбатан;
- ❖ бевосита харажатларга нисбатан;
- ❖ асосий воситалар амортизациясига нисбатан;
- ❖ бир турдаги асосий воситалар бўйича ижара ҳақиға нисбатан;
- ❖ бошқа белгиларга нисбатан.

IV блок. Молиявий ҳисоботда ёритиладиган ахборотлар.

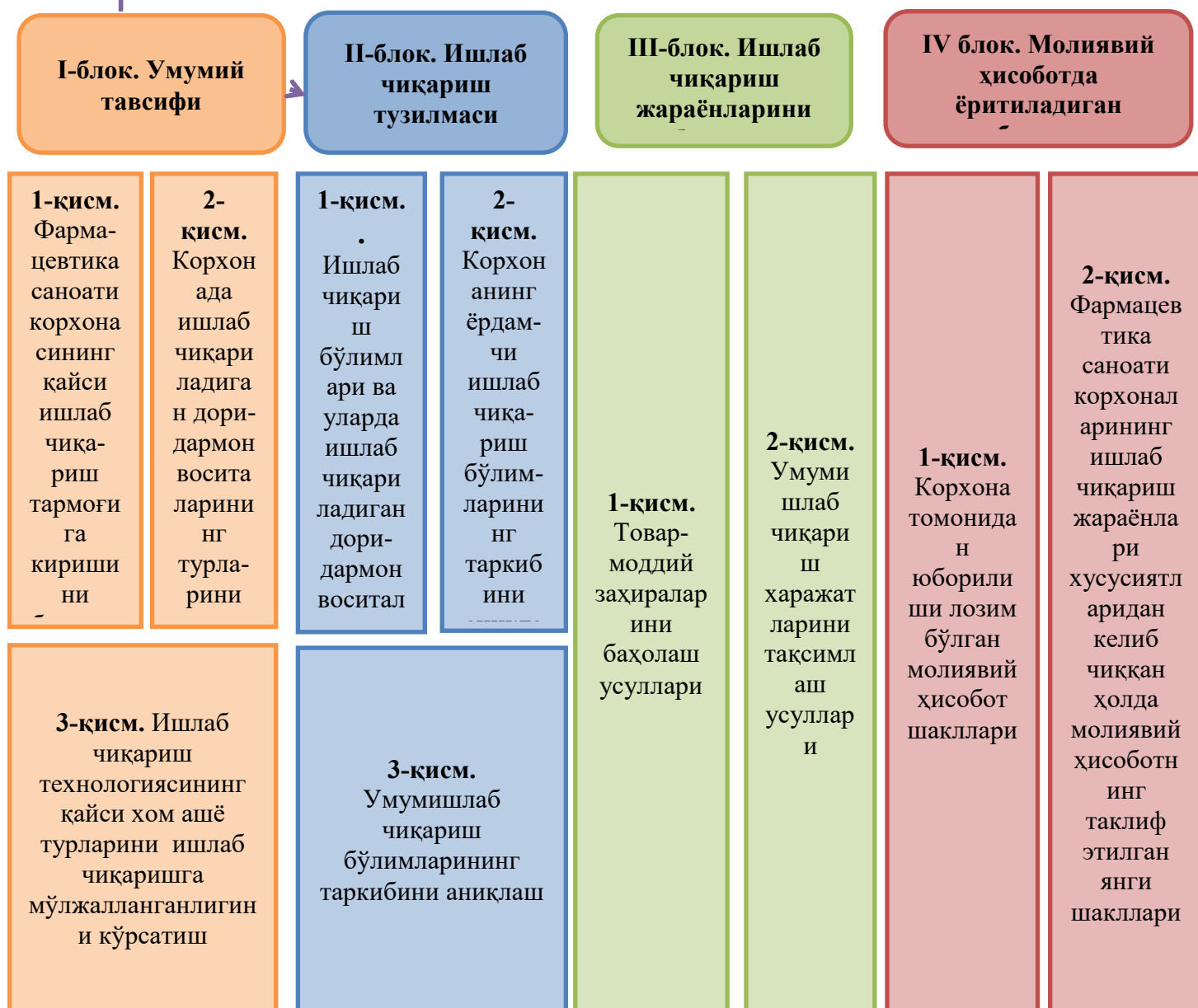
1-қисм. Корхона томонидан юборилиши лозим бўлган молиявий ҳисобот шакллари:

- ❖ бухгалтерия баланси;
- ❖ молиявий натижалар тўғрисидаги ҳисобот;
- ❖ пул-оқимлари ҳақидаги ҳисобот;
- ❖ хусусий камитал тўғрисидаги ҳисобот;
- ❖ изоҳлар, ҳисоб-китоблар ва тушунтиришлар.

2-қисм. Фармацевтика саноати корхоналарининг ишлаб чиқариш жараёнлари хусусиятларидан келиб чиққан ҳолда молиявий ҳисоботнинг таклиф этилган янги шакллари.

Юқоридаги ташкилий тузулмадан келиб чиқиб фармацевтика саноати корхоналари учун тавсия этилган “Ҳисоб сиёсати”ни қуйидаги расм орқали ифодаладик1.1-расм)

ҲИСОБ СИЁСАТИНИНГ ТАРКИБИ



1.1-расм. Фармацевтика саноати корхоналарида бухгалтерия ҳисобини юритиш бўйича Ҳисоб сиёсати²³⁸ хулоса

²³⁸ Тадқиқотлар асосида муаллиф ишланмаси.

Фармацевтика саноати корхоналарида ишлаб чиқариш жараёнлари ҳисобини такомиллаштириш бўйича қуйидаги хулоса ва таклифлар ишлаб чиқилди.

1. Олиб борилган тадқиқотлар натижасида фармацевтика саноати корхоналаридаги материаллар асосий ва ёрдамчи материалларга ажратилди. Биз томонимиздан тавсия этилган ушбу таснифлаш фармацевтика маҳсулотлари ишлаб чиқариш корхоналарида бошқарув қарорларини аниқ қабул қилишга, ишлаб чиқариш жараёнларини калькуляция қилишга ва маҳсулот таннархини аниқлашга хизмат қилади, деб ҳисоблаймиз.

2. Шунингдек, дори-дармон воситаларини ишлаб чиқувчи корхоналар томонидан хом ашё ва материаллар ҳисоби таҳлил қилиниб улар бўйича бухгалтерия операциялари ҳамда ушбу операция натижаларини бухгалтерия ёзувларида акс эттириш масалалари тадқиқ қилинди.

3. Тадқиқотлар давомида “Фармацевтика саноати корхоналарида бухгалтерия ҳисобини юритиш бўйича Ҳисоб сиёсати” ишлаб чиқилди ва унинг таркибий қисмлари келтирилди.

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*Свиридова В.В.
студент*

*Научный руководитель: Корнеенко О.Е.
старший преподаватель*

Гомельский государственный университет им. Ф. Скорины

ИННОВАЦИОННЫЕ ПОДХОДЫ В ОПТИМИЗАЦИИ СИСТЕМ УПРАВЛЕНИЯ СКЛАДАМИ И ЗАПАСАМИ ПРОМЫШЛЕННОГО ПРЕДПРИЯТИЯ

Аннотация. Данная статья рассматривает применение инновационных подходов в оптимизации систем управления складами и запасами на промышленных предприятиях. Склады и запасы играют важную роль в эффективной работе предприятий, и их оптимизация является ключевым фактором для повышения производительности и снижения издержек. Статья может быть полезной для менеджеров, специалистов по логистике и управлению запасами, а также для исследователей, интересующихся областью оптимизации систем управления складами и запасами.

Ключевые слова: инновационные подходы, оптимизация, системы управления складами, управление запасами, автоматическая идентификация, складские роботы, аналитика данных, облачные технологии, интернет вещей, цепи поставок.

*Sviridova V.V.
student*

*Francisk Skorina Gomel State University
Scientific adviser: Korneenko O.E.
teacher*

INNOVATIVE APPROACHES IN OPTIMIZING WAREHOUSE AND INVENTORY MANAGEMENT SYSTEMS OF AN INDUSTRIAL ENTERPRISE

Abstract. This article examines the application of innovative approaches in optimizing warehouse and inventory management systems at industrial enterprises. Warehouses and inventories play an important role in the efficient operation of enterprises, and their optimization is a key factor for increasing productivity and reducing costs. The article may be useful for managers, logistics and inventory management specialists, as well as for researchers interested in optimizing warehouse and inventory management systems.

Keywords: innovative approaches, optimization, warehouse management systems, inventory management, automatic identification, warehouse robots, data analytics, cloud technologies, Internet of things, supply chains.

Промышленные предприятия сталкиваются с уникальными вызовами в управлении своими складами и запасами. Оптимизация этих процессов является критической задачей для обеспечения эффективной работы и конкурентоспособности предприятия. В настоящее время существует ряд инновационных подходов в оптимизации систем управления складами и запасами, которые помогают промышленным достичь высокой эффективности.

Управление запасами и складскими операциями также имеет прямое влияние и на удовлетворение потребностей клиентов. Поэтому внедрение инновационных подходов в оптимизацию систем управления складами и запасами становится крайне актуальным. В данной статье рассмотрим несколько таких подходов и их роль в промышленном управлении запасами и складскими операциями.

1. Использование систем автоматической идентификации.

Системы автоматической идентификации, такие как штрих-коды, RFID и QR-коды, играют ключевую роль в современных информационных системах управления складами и запасами промышленных предприятий. Эти технологии позволяют быстро и точно идентифицировать товары и отслеживать их перемещение на складе. Системы автоматической идентификации также упрощают процессы инвентаризации и сокращают время, затрачиваемое на поиск и подсчет товаров. Благодаря использованию этих инновационных технологий предприятия могут повысить точность учета запасов, сократить ошибки и улучшить оперативность выполнения заказов.

Одна из возможных систем автоматической идентификации – технология RFID (радиочастотная идентификация). Преимущества данной технологии:

- повышение эффективности складского учета: метки RFID позволяют быстро и точно считать информацию о товарах, что сокращает время на инвентаризацию и повышает точность данных;
- улучшение контроля за перемещением товаров: RFID-метки позволяют отследить перемещение товара с момента его поступления на склад до момента его отгрузки заказчику;
- снижение вероятности ошибок при комплектации заказов: метки RFID исключают ошибки, связанные с «человеческим фактором», и позволяют автоматизировать процесс комплектации заказов;
- минимизация потерь от краж и хищений: RFID-метки обеспечивают контроль за перемещением товара на всех этапах логистической цепочки, что позволяет быстро обнаружить факт хищения [1].

2. Применение систем управления складскими роботами.

Системы управления складскими роботами являются одним из самых передовых инновационных подходов в оптимизации систем управления складами и запасами промышленных предприятий. Роботы могут выполнять различные задачи на складе, такие как перемещение товаров, упаковка, сортировка и погрузка. Они работают автономно или под контролем центральной системы управления. Применение складских роботов позволяет сократить ручной труд, снизить вероятность ошибок и улучшить производительность операций. Они также способны работать в непрерывном режиме, что повышает эффективность работы склада.

3. Внедрение систем управления запасами на основе аналитики данных.

Аналитика данных играет все более важную роль в управлении запасами промышленных предприятий. Использование алгоритмов машинного обучения и анализа данных позволяет прогнозировать спрос на товары, оптимизировать уровни запасов и определить оптимальные точки пополнения запасов. Аналитика данных также помогает выявить тренды и паттерны в спросе, что позволяет предприятиям принимать более обоснованные решения по управлению запасами. Внедрение систем управления запасами на основе аналитики данных позволяет предприятиям сократить расходы, улучшить обслуживание клиентов и снизить риск избыточных или недостаточных запасов.

4. Использование облачных технологий и интернета вещей (IoT).

Облачные технологии и интернет вещей (IoT) также являются инновационными подходами в оптимизации систем управления складами и запасами. Использование облачных платформ позволяет предприятиям хранить и обрабатывать большие объемы данных, а также предоставлять доступ к информации из любой точки мира. С помощью IoT-устройств, таких как датчики и умные метки, можно отслеживать условия хранения товаров (температуру, влажность и т. д.) и получать реальные и точные данные о состоянии запасов. Это позволяет предприятиям быстро реагировать на изменения и предотвращать потерю или порчу товаров.

5. Развитие систем управления цепями поставок (Supply Chain Management).

Системы управления цепями поставок становятся все более интегрированными и инновационными. Они связывают информационные системы предприятий с поставщиками, производством и распределением товаров. Использование современных технологий и инструментов, таких как системы прогнозирования спроса, планирование ресурсов предприятия (ERP) и электронная коммерция, позволяет оптимизировать всю цепь поставок, от заказа до доставки. Это позволяет предприятиям сократить время выполнения заказов, снизить расходы и повысить уровень обслуживания клиентов [2, с.58].

Инновационные подходы в оптимизации систем управления складами и запасами играют ключевую роль в операциях промышленных предприятий. Использование систем автоматической идентификации, складских роботов, аналитики данных, облачных технологий, IoT и систем управления цепями поставок позволяет предприятиям повысить эффективность и конкурентоспособность. Эти инновационные подходы помогают сократить расходы, улучшить обслуживание клиентов, снизить риск ошибок и оптимизировать уровни запасов. Применение этих подходов является важным шагом для успешного управления складами и запасами на промышленных предприятиях.

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*Сержанова А.К.
студент магистратуры
специальность «Технология
выращивания лекарственных растений»
Каракалпакский государственный университет им. Бердаха
Республика Узбекистан*

**ОСОБЕННОСТИ БИОЛОГИИ И АГРОТЕХНОЛОГИИ
ВЫРАЩИВАНИЯ ЭХИНАЦЕИ ПУРПУРНОЙ (*ECHINACEA
PURPUREA (L.) MOENCH*)**

*Аннотация. В статье рассматриваются особенности биологии и агротехнологии выращивания эхинацеи пурпурной (*Echinacea purpurea (L.) Moench*). Эхинацея является лекарственным, кормовым и медоносным растением, растет на хорошо дренированных, богатых питательными веществами грунтах, требует умеренного полива. Использование инсектицидов и меры механической защиты, эффективны в борьбе с вредителями растений.*

Ключевые слова: стебель, листья, цветки, минеральные удобрения, почва, грунт, полив, засуха.

*Serzhanova A.K.
master's student
specialty "Technology for growing medicinal plants"
Karakalpak State University named after. Berdakh
The Republic of Uzbekistan*

**FEATURES OF BIOLOGY AND AGROTECHNOLOGY GROWING
ECHINACEA PURPLE (*ECHINACEA PURPUREA (L.) MOENCH*)**

*Annotation. The article discusses the features of biology and agricultural technology for growing purple coneflower (*Echinacea purpurea (L.) Moench*). *Echinacea* is a medicinal, fodder and melliferous plant; it grows in well-drained, nutrient-rich soils and requires moderate watering. The use of insecticides and mechanical protection measures are effective in controlling plant pests.*

Key words: stem, leaves, flowers, mineral fertilizers, soil, soil, watering, drought.

Эхинацея пурпурная (*Echinacea purpurea*) — многолетнее, садовое декоративное растение из семейства Астровые, или Сложноцветные (*Asteraceae*). Классическое североамериканское прерийное растение с эффектными крупными

цветками, похожими на ромашки, с характерным высоким конусовидным центром. Высота растений составляет 90—100 см. Стебли прямые и шершавые. Прикорневые листья на длинных, крылатых черешках, широкоовальные, зазубренные, резко суженные к черешку, собраны в розетку; стеблевые — сидячие, ланцетные, шершавые, расположены в очередном порядке.

Соцветия — корзинки; крупные, до 15 см в диаметре. Язычковые цветки пурпурово-розовые, на верхушке заостренные, до 4 см длиной; трубчатые — красновато-коричневые. Цветёт с июля по сентябрь около 60 дней [4,6].

Эхинацею пурпурную впервые описал в 1753 г. Карл Линней и он отнес это растение к роду рудбекия и назвал рудбекией пурпурной (*Rudbeckia purpurea*). В 1794 г. немецкий ботаник Мёнх (Moench) выделил эхинацею в отдельный род, используя название, происходящее от греческого слова *echinos* – колючий [2].

Эхинацея обладает также антиаллергическим, антибактериальным, противовирусным и противомикотическим действием. Корни эхинацеи использовались при укусах ядовитых змей и при заражении крови, лечили язвы, опухоли, простуду. А также растение повышает естественные защитные силы организма и оказывает лечебное действие при различных болезнях.

В состав эхинацеи входят биологически активные производные фенолкарбоновых кислот. Растения также содержат также эфирные масла, смолы, фитостерины, углеводы, изобутиламины, жирные масла и другие вещества. Сок из свежих соцветий эхинацеи ускоряет процесс заживления ран.

Эхинацея пурпурная является кормовым и медоносным растением. При добавлении в корм зеленую массу эхинацеи пурпурной благоприятно действовало на рост молодняка крупного рогатого скота.

Размножается эхинацея семенами и вегетативно. Семена всходят без стратификации, при посеве в мае в открытый грунт всходы появляются через 2–3 недели, иногда через месяц и даже позже. К концу первого года жизни растения образуется розетка листьев 15–20 см высотой. На постоянное место растения надо пересаживать не позднее середины августа.

Эхинацея цветет только на второй год. Цветение продолжается с конца июля–начала августа до сентября. Вегетативно эхинацея размножается делением корневища рано весной. Эхинацея предпочитает хорошо освещенные места и устойчиво к засухе, но регулярное получение солнечного света способствует лучшему развитию цветков и укреплению иммунитета растения [7].

Эхинацея растет на хорошо дренированных, богатых питательными веществами грунтах. Перед посадкой рекомендуется внести в почву компост или перегной, чтобы обогатить ее и улучшить структуру. Для

стимуляции роста и цветения эхинацеи можно вносить комплексные минеральные удобрения в начале вегетационного периода. Лучшее время для посадки эхинацеи – весна или осень, в умеренных климатических условиях посадку рассады можно проводить в мае, когда минует угроза заморозков. Семена эхинацеи можно высевать непосредственно в открытый грунт весной, для чего подойдут участки с хорошим освещением и дренированным грунтом. Глубина посева – не более 1-2 см. [5].

Для получения более раннего цветения можно использовать метод выращивания рассады, начиная с февраля по март. Пересадка рассады в открытый грунт производится после установления теплой погоды. Также эффективным методом размножения является деление куста весной или осенью, что способствует омоложению растений и увеличению их цветения [1].

Подготовка грунта для посадки эхинацеи включает внесение удобрений, которые способствуют наилучшему росту и цветению растений. Использование комплексных минеральных удобрений или органических подкормок, таких как костная мука или компост, обогащает почву необходимыми питательными элементами. Рекомендуется вносить удобрения за несколько недель до посадки, чтобы элементы успели равномерно распределиться по почве [3].

Эхинацея требует умеренного полива, особенно в период засухи. Мульчирование почвы вокруг растений помогает сохранить влагу и предотвращает рост сорняков, обеспечивая оптимальные условия для роста эхинацеи.

Подкормки органическими удобрениями в начале вегетационного периода способствуют активному росту и обильному цветению эхинацеи. Дополнительное внесение минеральных удобрений может быть полезно в период формирования бутонов [5].

Регулярная обрезка отцветших соцветий стимулирует появление новых бутонов и продлевает период цветения эхинацеи. Удаление поврежденных и больших листьев помогает предотвратить распространение болезней. Эхинацея может подвергаться атакам таких болезней, как мучнистая роса, корневая гниль и ржавчина. Регулярный осмотр растений и своевременное удаление пораженных частей помогают контролировать распространение заболеваний.

При выращивании эхинацеи могут возникнуть трудности, связанные с болезнями и вредителями. Вредители, такие как тля и улитки, могут нанести вред эхинацеи. Своевременное обнаружение и правильная профилактика помогут избежать многих проблем. Использование инсектицидов и меры механической защиты, например, установка барьеров для улиток, эффективны в борьбе с вредителями.

Профилактика заболеваний включает в себя правильный выбор места посадки, обеспечение хорошего дренажа и воздухообмена между

растениями. Использование качественного посадочного материала и соблюдение севооборота также способствуют здоровью эхинацеи [5].

Таким образом, эхинацея пурпурная неприхотливое и красивое растение. Регулярная подкормка и профилактика болезней обеспечат здоровье растений и обильное цветение. Для успешного выращивания эхинацеи важно выбрать подходящее место, обеспечить питательную почву и соблюдать режим полива.

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*Султонов С.Н.
старший преподаватель
Университет экономики и педагогики
Узбекистан*

РЕФОРМЫ ДЛЯ РАВЕНСТВА: УЛУЧШЕНИЕ КАЧЕСТВА ЖИЗНИ

Аннотация. Статья рассматривает различные направления совершенствования реформ, нацеленных на улучшение условий жизни населения и снижение уровня доходного расслоения в стране. В статье анализируются текущие проблемы, предлагаются конкретные меры и рекомендации по повышению социальной защищенности граждан и сокращению разрыва между богатыми и бедными слоями общества.

Ключевые слова: трансферты, прогрессивные налоговые ставки, частный сектор, распределение доходов.

*Sultonov S.N.
senior teacher
University of Economics and Pedagogy
Uzbekistan*

REFORMS FOR EQUALITY: IMPROVING QUALITY OF LIFE

Annotation. The article examines various areas for improving reforms aimed at improving the living conditions of the population and reducing the level of income stratification in the country. The article analyzes current problems, proposes specific measures and recommendations to improve the social security of citizens and reduce the gap between rich and poor sections of society.

Key words: transfers, progressive tax rates, private sector, income distribution.

Введение. Социальное расслоение населения характерно для любой рыночной экономики, и в условиях социально ориентированной рыночной экономики государство берет на себя задачи по снижению неравенства доходов и обеспечению социального равенства на нормативном уровне в целях повышения благосостояния населения. Решение вопросов распределения и перераспределения доходов касается не только нуждающихся, но и «богатых».

Социально-политическое не только обеспечивает комфортный уровень жизни малообеспеченных слоев населения, но, прежде всего, регулярно развивающееся общество вырабатывает практический и эффективный механизм поддержания устойчивого баланса между его

группами с разным уровнем потребления и, соответственно, разным уровнем жизни.

Одной из основных целей социальной политики является обеспечение и поддержание сбалансированного состава групп населения с различным уровнем потребления и жизни. Также социальная политика:

- обеспечение «умеренного» уровня жизни каждого человека согласно отчету о перераспределении доходов;
- направление населения на реализацию мер социальной поддержки социально незащищенных групп населения, отдельных семей и отдельных лиц.

В Республике Узбекистан, используя данные переписи населения при анализе и мониторинге целей устойчивого развития, первой национальной целью является снижение уровня бедности населения во всех местах. «Темир Дафтар» ставит целью организовать регулярную работу с каждым человеком индивидуально. и систематически по финансовой помощи и семьям, нуждающимся в помощи, включая создание совершенно новой системы:

«Женская тетрадь» — опрос женщин и молодых людей, имеющих потребность и желание в социальной, экономической, юридической, психологической поддержке, знаниях и профессиональной подготовке.

Система труда «Махаллабай» обеспечивает финансовую поддержку реализации предпринимательской инициативы молодежи и женщин, обеспечивая занятость населения прибыльной работой.

Паспорт микрорайона - сводные таблицы, содержащие основные сведения о расположенных в микрорайоне домах, составе проживающего в них населения, объектах социальной сферы, имеющихся ресурсах, земельных участках, пустующих зданиях и сооружениях, объектах инфраструктуры, а также действующих предпринимателях.

Постановление Кабинета Министров Республики Узбекистан от 22 декабря 2017 года № 1011 «О совершенствовании методики определения количества лиц, нуждающихся в трудоустройстве, в том числе проведения исследований по вопросам занятости населения, а также формирования баланса трудовых ресурсов, занятости и занятости населения» эффективен. Для достижения стабильного и всеобъемлющего экономического роста, основанного на увеличении занятости и обеспечении мужчин и женщин достойной работой, мы можем видеть в качестве примера, что уровень безработицы в настоящее время составляет 10,5%, Молодежь 17,0%, Женщины 13,7%.

Наиболее альтернативным способом для каждой страны, проводящей социальные реформы, обеспечить социальное равновесие и уменьшить неравенство доходов населения и тем самым повысить благосостояние населения является повышение занятости населения. В нашей стране вопрос

обеспечения занятости населения решается за счет создания новых рабочих мест за счет развития предпринимательства.

Литературный обзор. Решением Президента Республики Узбекистан от 8 августа 2017 года № PQ-3182 «О первоочередных мерах по обеспечению опережающего социально-экономического развития регионов» в совершенствовании реформ по снижению расслоения населения по доходам определены все приоритетные направления, пять направлений развития Республики Узбекистан в 2017-2021 годах более 20 законов, принятых в рамках практической реализации Стратегии действий по приоритетному направлению, обеспечение безусловной, своевременной и качественной реализации мер, предусмотренных более чем 20 законами, более 180 указами и более 450 постановлениями Президента Республики Узбекистан, принятыми в рамках практической реализации Стратегии действий. по пяти приоритетным направлениям развития Республики Узбекистан в 2017-2021 годах считается важным условием достижения целей на современном этапе.

Постановление Президента Республики Узбекистан от 23.01.2023 о дополнительных мерах по дальнейшему совершенствованию деятельности Торгово-промышленной палаты в соответствии с Постановлением № PQ-15

- 1) защита прав предпринимателей.
- 2) разработка программ по улучшению деловой среды и инвестиционного климата.
- 3) поддержка предпринимательства.
- 4) образование предпринимателей и подготовка кадров.
- 5) взаимное сотрудничество с государственными органами.
- б)определяется привлечение внешнеэкономической деятельности и инвестиций.

Венецкий И.Г. Математические методы в демографии. – М., 1971., Методы демографического моделирования широко используются при анализе и прогнозировании процессов воспроизводства. Они описывают изменение численности населения или изменение составляющих его развития. Демография включает модели постоянного и стабильного населения в виде демографических таблиц, а также численные модели демографических процессов для гипотетического поколения, Также широко используются стохастические модели (спроса) и Хокозо. Современный этап развития демографических знаний характеризуется бурным развитием методов и приемов математического моделирования. В частности, расширяются возможности использования этих знаний в практике социального управления, все эти методы основаны на общественном взгляде на определенный демографический феномен.

Поэтому в методологии демографии большое значение имеют методы анализа и изучения количественных измерений демографических явлений. Половозрастная пирамида использовалась для наглядного отображения

половозрастного состава населения. Для этого вертикальная ось разделена по возрасту, слева – мужчины по возрасту, справа – женщины по возрасту. За единицу измерения принято пять лет.

Взгляды на налоги исторически формировались под влиянием объективных и субъективных факторов. Изменение и совершенствование налоговой системы основывалось на том, что вид, размер и способы взимания налога были разными. Налоги являются одним из основных источников финансирования всех сфер государственной деятельности и экономическим инструментом реализации государственных приоритетов.

Некоторые экономисты трактовали налоги как средство распределения и перераспределения национального дохода: «Налоги представляют собой форму присвоения части национального дохода в процессе распределения и перераспределения». Н.И.Тургенев в своей книге «Опыт теории налогов» (1818) утверждает, что «Успехи просвещения сказывались и на совершенствовании налоговой системы в зависимости от степени их благотворного воздействия на обычаи народа», «... налоги появились вместе с приобретением знаний и стали его символом....О распространении информации среди народа в зависимости от способа назначения, распределения и сбора налогов; о его богатстве можно думать в зависимости от суммы собранных налогов, которые являются двумя основными характеристиками, означающими знание и просвещение» из этих слов мы можем еще раз убедиться, что налоги считаются древними финансовыми институтами и возникли с появлением государства. Научный электронный журнал налоговых органов государственной власти "Экономика и инновационные технологии". № 2, март-апрель 2017 г. № 2, 2017 г. www.iqtisodiyot.uz 4 и послужили источником материальной поддержки для выполнения стоящих перед ними задач. С развитием государства его задачи и функции приобретали новые черты. Шотландский экономист Адам Смит (1723-1790) впервые изложил принципы налогообложения в своей книге «Причины и природа богатства народов» (1776).

В свою очередь, Д. Рикардо, развивший в определенной степени теорию налогов, созданную А. Смитом, объяснил природу налогов тем, что «Налоги представляют собой часть земельных продуктов и труда страны, подпадающих под власть власти». правительства, и в конечном итоге они выплачиваются за счет капитала или за счет доходов страны». Другое приемлемое определение дает С.Г. Пепеляев: «Налог является единственной формой отчуждения имущества физических и юридических лиц в целях обеспечения платежеспособности субъектов публичной власти, определяемой законом на основе обязательства, исключительно объективного, невозвратного, предусмотренного государством. принуждение и не имеющее характера наказания или пособничества». По мнению профессора Д.Г. Черника, «налоги отражают обязательные сборы,

взимаемые государством с хозяйствующих субъектов и граждан по законодательно установленным ставкам». Ш. Гатаулин на вопрос «...что такое налоги, зачем они нужны» отвечает следующим образом: «Налоги являются основным источником государственных расходов, средством регулирования экономики и стабилизации доходов. «Налоги являются основным источником доходов государственного бюджета и важным инструментом управления экономикой». Следует отметить, что, по мнению профессора О.Олимжонова, если налоги определить следующим образом, то сущность налогов будет раскрыта более широко и адекватно. "Налоги - это платежи, которые в принудительном порядке взимаются с физических и юридических лиц по усмотрению государства в целях удовлетворения потребности государства и общества в денежных средствах в размере и в сроки, определенные законом". Научный электронный журнал «Экономика и инновационные технологии». №2, март-апрель 2017 г. Если обратить внимание на мысли о налогах, то они в основном рассматриваются как средство наполнения государственной казны, формирования и развития экономические мысли, они оцениваются на основе их финансового аспекта.

Теории западных экономистов основаны на концепции английского экономиста Дж. М. Кейнса. Согласно концепции, налоги, помимо своей фискальной функции, имеют функции регулирования экономики, стимулирования и управления доходами, эти функции налога возникают из необходимости использования его как средства регулирования экономики и обеспечения устойчивого экономического развития. рост.

Представитель некейнсианского направления Л. Харротт, Н. Калдор, А. По мнению Хансена и П. Самуэльсона, налоги имеют функцию регулирования экономики. Они считают, что эту функцию можно выполнить, изменяя налоговые ставки и предоставляя различные льготы. По словам английского экономиста С. Паркинсона: «Налоги стары как мир, причиной их возникновения было то, что местный полководец взимал плату с купцов и путешественников, когда они проходили через реку или гору на его территории». 1. Налоги и сборы являются обязательными, при которых государство забирает часть доходов налогоплательщика в качестве обязательного отчисления в бюджет. Данное обязательство реализуется на основании положений Налогового кодекса, утвержденного Олий Мажлисом. Итак, знак обязательства юридически гарантируется государством. 2. Налоги поступают в казну государственного бюджета. Но другие виды выплат в сбережения не отражают налоговых отношений. Научный электронный журнал «Экономика и инновационные технологии». №2, март-апрель 2017 г. №2, 2017 г. www.iqtisodiyot.uz 3. Налоги фиксированы и находятся в постоянном движении. Исторически сложилось так, что существуют налоги, которые остаются неизменными на протяжении веков. Чем глубже ее научная основа, тем прочнее и неизменнее она действует на протяжении многих лет.

4. Сумма налога, уплаченная государству, не возвращается плательщику полностью, то есть является неравным денежным платежом. Налоги являются основным финансовым источником, из которого собирается часть созданного обществом продукта для формирования. Доходы государственного бюджета в течение длительного периода времени. Также налоги являются одним из основных финансовых ресурсов, необходимых для реализации всех общегосударственных мероприятий государства и являются основным средством экономического развития страны и реализации указанных реформ.

В условиях модернизации экономики в Налоговом кодексе определены налоги, взимаемые в определенных размерах, регулярные, невозвратные и неизбирательные, обязательные денежные платежи, направляемые в бюджет. Итак, налоги – это деньги, поступающие в бюджет и обязательные отношения, определенные законом. Обязательство по уплате налогов предусмотрено правовыми и нормативными законами, утверждаемыми Олий Мажлисом.

Следовательно, налогоплательщики не имеют права не платить налоги, скрывать объект налогообложения, занижать сумму налога. Мы знаем, что конкурентная рыночная система направляет ресурсы на производство товаров и услуг, которые нужны обществу больше других, и именно на эту деятельность негативно влияет механизм косвенного налогообложения.

Методология исследования. При написании данной статьи были использованы данные переписи населения Республики Узбекистан, анализа и мониторинга целей устойчивого развития, текущие показатели торгово-промышленной палаты, агентства по статистике, ставки налогов, а также ученых, проводивших научные исследования в эти области широко использовались в пособиях.

Анализ и обсуждение результатов. В результате проведенной в 2023 году работы, по наблюдениям за 16 тысячами домохозяйств, проведенным Агентством по статистике, уровень бедности в нашей стране снизился до 11,0% к концу 2023 года.

В нашей стране бедность снизилась на 3,1 процента по сравнению с прошлым годом, а уровень бедности по итогам 2022 года составил 14 процентов. Снижение уровня бедности зафиксировано во всех регионах, включая Сырдарьинскую (с 19,5% до 13,8%), Андижанскую (с 17,4% до 11,9%) и Каракалпакстанскую (с 19,9% до 13,7%) области.

Минимальные изменения выявлены в городе Ташкенте (с 8,5% до 7,9%), Бухарской (с 11,9% до 11,8%), Кашкадарьинской (с 12,7% до 11,5%) областях.

Для справки: в 2023 году обеспечено 4,1 млн человек, в том числе 2,3 млн на постоянной и сезонной работе, 112,8 тыс. на оплачиваемых общественных работах, 1,6 млн на самозанятости;

С помощью помощников мэра 241,3 тысячам горожан были выделены земли в аренду;

- в рамках программы «20 тысяч предпринимателей и 500 тысяч квалифицированных специалистов» Подписание договоров о сотрудничестве с 6745 субъектами хозяйствования для обеспечения благосостояния 455 тысяч жителей;

- также 10 трлн на 472 тыс. семейных бизнес-проектов. льготных кредитов и 356 миллиардов сумов для 73 тысяч безработных граждан. Распределение средств субсидии;

- В результате реализации 51 тыс. микропроектов на основе добрососедства создано 206 тыс. новых рабочих мест;

- 181 тысяча безработных граждан обучены профессиям и созданы 183,8 тысячи новых хозяйствующих субъектов;

- исходя из уровня инфляции, значение МІХ (минимальных потребительских расходов), рассчитанное на 2024 год, составило 621 тыс.сум:

- за счет создания «Индивидуальных программ» для малоимущих семей в 2023 году из 208 тысяч семей выведены из бедности 873 тысячи членов семей, а в 2024 году планируется вывести из бедности 150 тысяч семей (и 700 тысяч членов их семей) бедность.

В условиях рыночной экономики определенная часть трудовых ресурсов занята в неформальном секторе. В определенном смысле обеспечение занятости в неформальном секторе не защищает социальные права работников. В результате сотрудники не охвачены системой социальной защиты. (пенсия, право на льготы, больничные и декретные отпуска). Дальнейшее сокращение неформальной занятости и легализация существующей занятости является важным фактором, особенно среди начинающих предприятий.

Существующие проблемы на рынке труда, в том числе: опережающее развитие трудоемких отраслей и предприятий, особенно в сельской местности, в условиях роста территориальной и межотраслевой мобильности рабочей силы, создание правовых основ для увеличения занятости за счет Легальный и социально защищенный электронный экспорт трудовых ресурсов является важным фактором повышения благосостояния населения.

Кроме того, целесообразно создание широкомасштабных условий для производства других видов аналогичной продукции с учетом дополнительных доходов действующих хозяйствующих субъектов на основе их опыта. Необходимо расширить количество новых рабочих мест путем предоставления льготных кредитов работникам, имеющим регулярный стаж работы 3-5 лет и обладающие достаточной квалификацией и опытом начала новой предпринимательской деятельности с использованием своей квалификации.

В зависимости от демографического положения населения, в зависимости от вида продукции, выращиваемой в хозяйствах населения в населенных пунктах, целесообразно строить предприятия и фирмы в районах, близких к населению, для увеличения доходов населения за счет переработка и упаковка продукции, выращенной населением.

Масштабное развитие сферы услуг в регионах с высокой безработицей населения требует создания мелких филиалов крупных профессиональных предприятий по производству продукции в регионах с высокой безработицей.

В целях снижения уровня расслоения населения по доходам в нашей стране установлены прогрессивные ставки налогообложения доходов физических лиц. При прогрессивных налоговых ставках по мере увеличения дохода, то есть налоговой базы, растут и ставки. Прогрессивная ставка налога бывает простой и сложной, в простой форме ставка налога увеличивается для всех частей дохода, а в сложной форме доход налогоплательщика делится на части, и к каждой части применяется соответствующая ставка налога этого.

Выводы и предложения. В нашей стране налоги на доходы физических лиц взимаются посредством сложных прогрессивных налоговых ставок, что приводит к снижению налоговой нагрузки на малообеспеченные слои населения и увеличению их располагаемых доходов. Лица с высокими доходами облагаются подоходным налогом по более высоким ставкам только на увеличенную часть своего дохода. Таким образом можно сократить разницу между доходами высокодоходных и низкодоходных слоев населения, не ограничивая при этом рост доходов населения.

Реформы во всех сферах, направленные на улучшение условий жизни населения и снижение уровня доходного расслоения в нашей стране, сегодня приносят свои плоды, и сегодня уровень доходного расслоения населения доведен до нормативного уровня. Учитывая сложившуюся ситуацию с доходным расслоением населения, в целях дальнейшего снижения уровня неравенства доходов, увеличения денежных доходов населения и обеспечения социальной защиты особое внимание следует уделить следующему:

- постоянно повышать занятость населения;
- создать рабочие места за счет дальнейшего развития предпринимательства и принять меры по вовлечению населения в предпринимательство;
- усилить социальную защиту занятых в них работников путем легализации деятельности субъектов неформального сектора;
- расширение возможностей резидентов использовать собственное имущество и движимые имущества в предпринимательской деятельности и получать доходы;

- обеспечить социальные трансферты слоям населения, нуждающимся в социальной защите, и проиндексировать их размер;

- проведение разумной налоговой политики в отношении доходного имущества населения в целях недопущения выплаты доходов и имущества по усмотрению отдельных групп населения.

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Суюнова К.Б.
исполняющий обязанности доцента
кафедра “Маркетинга”
Самаркандский институт экономики и сервиса

РОЛЬ МАРКЕТИНГА В РАЗВИТИИ ТУРИЗМА В ПОСТПАНДЕМИИ COVID-19

Аннотация. В статье обоснованно совершенствование системы государственной поддержки по обеспечению высоких темпов развития туризма и поддержки субъектов предпринимательства позволяющего созданию прочной основы для восстановления постпандемийного уровня развития туризма и вывода его на новый качественный уровень развития при помощи маркетинговых инструментов.

Ключевые слова: туризм, государственное регулирование, туристические услуги, пандемия, маркетинговые коммуникации, предпринимательство, малый бизнес.

Suyunova K.B., PhD
acting associate professor
Department of Marketing
Samarkand Institute of Economics and Service

THE ROLE OF MARKETING IN TOURISM DEVELOPMENT IN THE COVID-19 POST-PANDEMIC

Abstract. The article substantiates the improvement of the system of state support to ensure high rates of tourism development and support for business entities, allowing for the creation of a solid foundation for restoring the post-pandemic level of tourism development and bringing it to a new qualitative level of development with the help of marketing tools.

Key words: Tourism, government regulation, tourism services, pandemic, marketing communications, entrepreneurship, small business.

Введение. В мире индустрия туризма стала одной из важнейших отраслей экономики, и в то же время, когда микро - и макромасштабные туристские зоны находятся в условиях жесткой конкуренции, вопрос достижения устойчивой конкурентоспособности становится все более актуальным. В частности, за счет развития цифровой экономики достигается устойчивая конкурентоспособность туристских территорий и рост экономических показателей. Поэтому достижение конкурентоспособности туристической зоны на глобальном уровне при сохранении социальной, экономической и экологической стабильности

является приоритетной задачей и требует совершенствования методологии управления туристскими территориями на основе концепции устойчивого развития.

Сформировавшаяся под негативным влиянием последствий пандемии коронавируса современная нестабильная конъюнктура на мировом рынке туристических услуг требует обогащения государственного влияния на данную отрасль экономики новым содержанием, соответствующим реалиям сегодняшнего дня. Вопросы регулирования и упорядочения предпринимательского сектора в сфере туризма органами государственной власти, в частности его активной финансовой поддержки, требуют разработки новых, научно обоснованных эффективных подходов, отвечающих современным требованиям. Совершенствование системы государственной поддержки по обеспечению высоких темпов развития туризма и поддержки субъектов предпринимательства позволит создать прочные основы для восстановления до пандемийного уровня развития туризма и вывода его на новый качественный уровень развития. Окончательное решение таких сложных задач ставит вопрос о регулировании туризма и совершенствовании системы государственной поддержки малого бизнеса.

Маркетинг в туризме – это неотъемлемый элемент успешной работы компаний, занимающихся организацией путешествий. Он помогает определить потребности и предпочтения целевой аудитории, создать уникальное предложение на рынке, привлечь новых клиентов и удержать имеющихся.

Анализ литературы. Большой вклад в изучение проблем, связанных с туризмом и совершенствованием теоретико-методологических основ его развития, влияния отрасли на национальную экономику, политику и культуру внесли такие ученые как, Ж.М.Кейнс, А.Маршалл, В.И.Азар, Н.И.Волошин, М.Портер²³⁹. Формы предпринимательства в туризме, функционирование туристского рынка, его структура и механизмы, в том числе вопросы его государственного регулирования исследованы в трудах А.Ю.Александровой, Д.Н.Демченко, М.А.Жуковой, Г.А.Карповой, Л.В.Хоревой, И.Т.Балабанова, А.И.Балабанова, М.М.Мухаммедов, Д.Х.Аслановой, М.Т.Алимовой²⁴⁰ и другие.

²³⁹ Keynes J.M. The general theory of employment, interest, and money. – Springer, 2018. – 404 p.; Marshall A. Industry and trade. – Vani Prakashan, 2015. – 556 p.; Азар В.И. Экономика и организация туризма. – М.: Профиздат, 1993.; Волошин Н.И. Правовое регулирование туристской деятельности М.: Финансы и статистика, 1998. – 120 с.; Портер М.Э. Конкуренция / пер. с англ. – М.: Изд.дом «Вильямс», 2005. – 808 с.

²⁴⁰ Александрова А.Ю. Международный туризм: Учебное пособие для вузов. – М.: Аспект Пресс, 2001. – 464 с.; Демченко Д.Н. Взаимодействие государства и бизнеса: принципы, инструменты, институциональная трансформация в посткризисной экономике. Автореф. Дис. Канд. Экон наук. Ростов-на-Дону. – 2005. – С. 15.; Жукова М.А. Менеджмент в туристском бизнесе: учебное пособие. – 2-е изд., стер. – М.: КНОРУС, 2006. – 193 с.; Карпова Г.А., Хорева Л.В. Экономика и управление туристской деятельностью. Учебное пособие. – СПбГУЭФ, 2011. – 268 с.; Балабанов И.Т., Балабанов А.И. Экономика туризма. Учебное пособие. – М: Финансы и статистика, 2003. – 176 с.; Мухаммедов М.М. ва бошқалар.

Анализ и результаты. В ходе исследования выявлено, что индустрия туризма имеет две характерные особенности. Во-первых, помимо объектов и средств производства собственной отрасли, в формировании туристской инфраструктуры активно участвуют ряд других отраслей. Поэтому регулирование этих секторов, имеющих большое значение для организации туристских услуг, должно стать важным направлением государственной экономической политики. Во-вторых, туристические услуги требуют обеспечения безопасности посетителей и защиты их интересов. Это означает, что данная особенность туризма должна быть отражена в нормативных актах, регулирующих его деятельность. Правовые документы должны быть направлены как на защиту интересов туристов, так и поставщиков услуг.

Для выявления негативных последствий COVID-19 сферу туризма необходимо провести анализ влияния государственной политики на макроуровневые показатели развития туризма, анализ эффективности мер государственной поддержки, практики применения механизмов регулирования экономической деятельности субъектов малого и частного предпринимательства в сфере туризма, анализ эффективности мер по поддержке туристической отрасли со стороны государства.

Процесс анализа был основан на двух периодах. Первый период – это период до начала широкомасштабных экономических реформ в Узбекистане в соответствии со «Стратегией действий». Этот период охватывает 2014-2016 годы. Второй и самый важный период – период подъема туризма в 2017-2021 годах. Именно в такой последовательности был проведен процесс анализа, из которого были сделаны соответствующие выводы.

Результаты анализа показали, что государственная политика приоритетного развития туризма оказала существенное положительное влияние на состояние и развитие макроуровневых показателей отрасли (таблица-1).

Данные таблицы показывают, что основные показатели, характеризующие туристскую деятельность, в течение 2014-2019 годов неуклонно росли. Об этом свидетельствует тот факт, что за этот период количество туристов, посетивших Узбекистан, увеличилось в 3,6 раза, или 4886 человек. Также констатируем, что в основных показателях, характеризующих туристскую деятельность, по сравнению с 2014-2016 годами, т.е. до начала радикальных реформ по развитию отрасли, начатых государством по инициативе Президента с 2017 года, принятия новых

Хизмат кўрсатиш соҳаси ва туризмни ривожлантиришнинг назарий асослари //Монография. «Зарафшон» нашриёти, 2017. – 300 б.; Асланова Д.Х., Алимова М.Т., Саттарова З.И., Захидов Ф.Ф., Хайдаров О.З. Агрэко-туристический кластер: сущность и возможность его формирования в регионах. Монография. Самарканд. Турон – нашр. 2020. - 275 с.;

нормативных документов и начала последовательных действий по их реализации в отрасли произошли значительные позитивные процессы и радикальные изменения.

Таблица 1

Динамика основных показателей, характеризующих состояния туризма в Узбекистане в 2014-2019 годах в макро степени²⁴¹

Показатели	Годы						Рост в 2019 году по сравнению с 2014 годом, (раз)
	2014	2015	2016	2017	2018	2019	
Въездной туризм, тыс. человек	1861,9	1918,0	2027,0	2690,0	5346,2	6748,5	3,6
Выездной туризм, тыс. человек	2785,8	3504,3	3847,8	5182,5	8594,8	8437,8	3,0
Внутренний туризм, тыс. человек	1571,5	1754,2	1871,7	2145,8	2255,5	2480,8	1,6
Количество занятых в туризме, тыс. человек	103,4	150,2	170,9	187,6	201,0	260,1	2,5
Инвестиции, млрд. сум	731,4	851,4	1052,1	1428,3	1956,1	1741,6	2,4
Экспорт туристических услуг, млн. долл.	102,7	134,2	430,7	546,9	1041,1	1313,0	12,7
Количество гостиниц и объектов размещения	513	661	750	816	916	1051	2,0
Количество мест на объектах размещения, тыс.	15,264	18,297	31,950	37,065	41,096	54,799	3,5
Количество туристических фирм и организаций (вместе)	343	398	433	449	502	517	1,5

Если говорить конкретно, то в период с 2017 по 2019 год, то есть за 3 года, доходы от экспорта туристических услуг выросли почти в 2,5 раза: если в 2017 году они составляли 546,9 млн. долларов США, то к 2019 году достигли 1313,0 млн. долларов США.

Такой стремительный рост экспорта туристических услуг позволил увеличить его долю в ВВП страны с 1,4 % (2017 г.) до 2,5 % (2019 г.). С полным правом можно сказать, что эти достижения в укреплении туристических услуг в ВВП страны являются большим достижением для

²⁴¹ Подготовлено автором на основе данных Государственного комитета по статистике Республики Узбекистан. // <https://stat.uz>. Туризм в Узбекистане: Сборник статистических данных за 2016-2019 годы (стр.28-29).

Узбекистана, который на протяжении многих лет не может эффективно использовать свой огромный туристический потенциал. Подсчитано, что за последние три года объем туристических услуг вырос с 102,7 млн. долларов США до 430,7 млн. долларов США, или в 4,1 раза. На основе сравнительного анализа темпов роста туристского экспорта в Узбекистане до и после начала масштабных реформ сделан вывод о том, что нынешняя управленческая политика государства в сфере туризма весьма эффективна.

Результаты анализа показали существенное положительное влияние на динамику туристского экспорта и другие важные показатели отрасли. Например, за 2016-2019 годы количество иностранных туристов, посетивших страну, увеличилось в 3,6 раза. Причина в том, что за этот период правительством были приняты десятки документов, направленных на развитие туризма, приняты оперативные меры по обеспечению их реализации.

Пандемия коронавируса, охватившая стремительно идущий по пути стремительного развития Узбекистан, полностью разрушила планы страны по опережающему развитию туризма. Кризис во всех странах мира оказал негативное влияние на туризм в Узбекистане, а также темпы роста его макроуровневых показателей. В диссертации с использованием точных данных проанализированы масштабы ущерба и размеры убытков, нанесенных туристической отрасли страны из-за негативных последствий пандемии коронавируса (таблица 2).

Таблица 2.

*Анализ ущерба нанесенного последствиями коронавирусной пандемии в 2018-2020 годах в сфере туризма в Республике Узбекистан*²⁴²

Наименование показателей	2018		2019		2020	
	Прогноз	Реальн	Прогноз	Реальн	Прогноз	Реальн
	з	о	з	о	з	о
Количество иностранных туристов в Узбекистан (тыс. человек)	5346	5346,2	6 041	6748,5	7 010	1504,1
Экспорт туристических услуг (млн. долларов США)	1041,0	1041,1	1 180,0	1313,0	1 360,0	261,0
Количество внутренних туристов (тыс. визитов)	15 493,0	2255,5	16 10,0	2480,0	17 230	1807,0
Количество гостиниц и других объектов размещения (шт)	914	916	1 100	1056	1620	1308
Количество номеров на объектах размещения (тыс.)	20,2	24	24	32	35	25

²⁴² Разработано автором на основе данных Государственного комитета Республики Узбекистан по статистике.

Количество мест на объектах размещения (тыс.)	41	44	49	52	72	50
Количество туроператоров (кол-во)	983	983	1 100	1100	1 190	1 190

При разработке стратегий развития малого бизнеса и краткосрочных программ поддержки со стороны государства следует учитывать, что объединение субъектов предпринимательства с туристическими ассоциациями на основе маркетинговой стратегии может быть более эффективным в достижении поставленных целей (Рисунок-1.)



Рис. 1. Направления совершенствования системы государственного регулирования и поддержки предприятий и организаций в сфере туризма в новом Узбекистане²⁴³

Например, в процессе управления для выбора и разработки стратегий развития туристических предприятий и организаций менеджеры нуждаются в поиске, обработке и анализе соответствующей оперативной информации. Обычно эти процессы осуществляются с большими затратами. Это повышает стоимость туристических услуг и негативно сказывается на их конкурентоспособности на мировом рынке. В качестве решения этой проблемы было предложено создать специальную ассоциацию при министерстве.

²⁴³ Разработан автором.

Фонд финансирует мероприятия и программы, связанные с удовлетворением потребностей малого бизнеса.

По нашему мнению, информационно-аналитическая ассоциация по поддержке деятельности организаций в сфере туризма в Республике Узбекистан должен состоять из следующих 2-х отделов: научного отдела и отдела маркетинга.

Научный отдел занимается решением и реализацией таких важных задач, как повышение эффективности использования научного потенциала профессоров и преподавателей, участвующих в системе подготовки кадров при решении задач в сфере туризма, обеспечение конкурентоспособности, повышение эффективности использования экономических ресурсов, активизация инновационной деятельности на предприятиях и организациях отрасли.

Маркетинг в туризме представляет собой процесс организации деятельности турфирмы по разработке, формированию и продвижению новых видов туристских и экскурсионных услуг с целью получения прибыли на основе повышения качества туристского продукта и учитывая особенности потребностей туристов. «...маркетинг (marketing) можно определить, как процесс, посредством которого организации создают ценность для клиентов и формируют прочные отношения с ними с целью последующего получения ценности. В основе маркетинга лежит идея удовлетворения человеческих нужд²⁴⁴.

Отдел маркетинга проводит маркетинговые исследования с целью изучения рыночной ситуации, тенденций изменения рынка, конкурентной среды на рынке, потребностей населения в туристических услугах, его доходов, объема спроса и предложения на туристические услуги, факторы, влияющие на него, сегмент рынка и цена. Для этого кафедра собирает соответствующие данные, анализирует их, делает выводы и вносит научно обоснованные предложения.

Совокупная стоимость маркетинговой деятельности, создание сайта и затраты на техническое обслуживание предприятия или организации, входящей в состав Ассоциации, значительно снижаются, так как замещаются расходы на содержание соответствующих подразделений. В качестве доказательства нашей точки зрения хотим привести некоторые расчеты. Например, затраты, связанные с проведением маркетинговой деятельности.

Экспертно-аналитические расчеты показывают, что примерная смета туристского предприятия или организации на осуществление

²⁴⁴ А. А. Романов, В. П. Басенко, Б. М. Жуков. Маркетинг. Учебное пособие. Москва. Издательско-торговая корпорация «Дашков и К^о» 2012

Солиева, Г. А. Туризм в Узбекистане и роль маркетинга в его развитии / Г. А. Солиева, Б. Н. Дедажанов, Р. М. Каримжанова. — Текст : непосредственный // Молодой ученый. — 2020. — № 5 (295). — С. 132-134. — URL: <https://moluch.ru/archive/295/67017/> (дата обращения: 16.04.2024).

маркетинговой деятельности составляет 12 млн. сум. Дополнительное обучение работников в год - 3 млн. сум, ежегодные затраты на сайт - 12 млн. сум. Таким образом, общие расходы составляют 27 миллионов сумов.

Важно определить экономическую эффективность, получаемую от членства туристических предприятий и организаций в предлагаемой ассоциации. Эта задача выполняется в следующей последовательности. Первоначально рассчитывается средняя сумма расходов, соответствующая доле каждого субъекта, входящего в состав ассоциации. Рекомендуется использовать следующую формулу²⁴⁵:

$$RP_1 = \frac{\sum_{i=1}^N RP}{N}, (1)$$

Где:

RP_1 – средняя сумма годовых затрат, приходящих на долю каждого предприятия или организации;

RP – сумма годовых затрат центра;

N – количество туристических предприятий и организаций, являющихся членами центра.

Определенная в результате расчетов цифра, т. е. сумма среднегодовых затрат (RP_1) сравнивается с индивидуальными затратами (RP) туристского предприятия в течение года. Число, полученное в результате сравнения, указывает на размер эффективности, которую получило предприятие от членства в ассоциации. На основе суммы экономической эффективности, достигнутых всеми участниками, будет определена общая экономическая эффективность для туристического сектора от ассоциации. Обоснована необходимость повышения конечной эффективности государственной финансовой поддержки деятельности туристских предприятий. Разработан механизм распределения бюджетных ресурсов исходя из потребностей туристского объекта.

Рекомендации и заключение. Результаты анализа показали, что под негативным влиянием пандемии объем экспорта туризма в 2020 году по сравнению с 2019 годом уменьшился на 1052 млн. долларов США. С учетом этой сложной ситуации и особенностей социально-экономического развития в Узбекистане схематично были обозначены стоящие перед государственными органами основные приоритетные задачи для достижения положительных изменений в сфере туризма.

Процесс анализа государственной политики в сфере туризма осуществлялся на основе охвата двух периодов. Первый период – это период до начала масштабных экономических реформ в Узбекистане в соответствии со «Стратегией действий», второй период – рост туризма в

²⁴⁵ К.Б.Суюнова «Мамлакатимизда туризм ташкилотлари фаолиятини кўллаб-қувватлаш мақсадида маркетинг инструментлари орқали самарали тизим яратиш» // Журнал. Яшил иктисодиёт ва тараққиёт 4-сон.2024й.

результате масштабных реформ. На основе сравнительного анализа темпов роста в оба периода сделан вывод о том, что текущая управленческая политика государства в сфере туризма более эффективна, чем в предыдущий период. Если в 2014-2016 годах турпоток увеличился на 110 %, то в 2017-2019 годах он увеличился в 2,5 раза.

В ходе исследования были проанализированы показатели количества малых предприятий, работающих в сфере туризма, индикаторы количества обслуженных ими туристов. Результаты анализа показывают, что за 2016-2019 годы количество малых предприятий и микрофирм в сфере туризма в Узбекистане увеличилось на 20,2 %, количество гостиниц - на 52,2 %, количество санаторно-курортных учреждений - на 54,1 %, количество развлекательных центров и туристических объектов в 2,8 раз.

По результатам анализа сделан вывод о том, что в политике поддержки государственных хозяйствующих субъектов должно уделяться особое внимание стимулированию их инвестиционной активности. Для этого было предложено включить в перечень показателей долю собственных инвестиций туристского предприятия (организации) в общем объеме инвестиций. В работе изложены авторские подходы, научные предложения, рекомендации и мнения по совершенствованию регулирования и поддержки сферы туризма.

В целях снижения руководителями предприятий финансовых и временных затрат на поиск, обработку и анализ данных, предложено создать специальную ассоциацию при министерстве на основе маркетинговых инструментов.

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*Турдалиев З.
ассистент
Джизакский политехнический институт
Республика Узбекистан, г.Джизак
Ачилов Э.
ассистент
Джизакский политехнический институт
Республика Узбекистан, г.Джизак*

**ПЕРСПЕКТИВНЫЕ ТЕХНОЛОГИИ СБОРА И ПЕРЕРАБОТКИ
КУКУРУЗЫ В УСЛОВИЯХ УЗБЕКИСТАНА: СРАВНИТЕЛЬНЫЙ
АНАЛИЗ ЭФФЕКТИВНОСТИ И УСТОЙЧИВОСТИ
ПРОИЗВОДСТВА**

Аннотация. Исследование описывает существующие методы сбора и переработки кукурузы в Узбекистане, а также анализирует эффективность использования различных машин, таких как комбайны КОР-1,4 "Хersones-7", ККР-3 "Хersones-9" и ККР-2 "Хersones-10". Представлена новая схема сбора и переработки кукурузы, которая повышает производительность, уменьшает потери урожая и улучшает качество готового продукта.

Ключевые слова. кукуруза, сбор урожая, переработка, комбайн, агроинженерия, эффективность, качество продукта, уменьшение потерь, управление отходами, экологическое воздействие.

*Turdaliev Z.
assistant
Jizzakh Polytechnic Institute
Republic of Uzbekistan, Jizzakh
Achilov E.
assistant
Jizzakh Polytechnic Institute
Republic of Uzbekistan, Jizzakh*

**PROMISING TECHNOLOGIES FOR CORN HARVESTING AND
PROCESSING IN UZBEKISTAN: A COMPARATIVE ANALYSIS OF
EFFICIENCY AND PRODUCTION SUSTAINABILITY**

Abstract. The study describes the existing methods of harvesting and processing corn in Uzbekistan and analyzes the effectiveness of using various machines such as KOP-1,4 "Хersones-7," ККР-3 "Хersones-9," and ККР-2 "Хersones-10." A new scheme for harvesting and processing corn is presented,

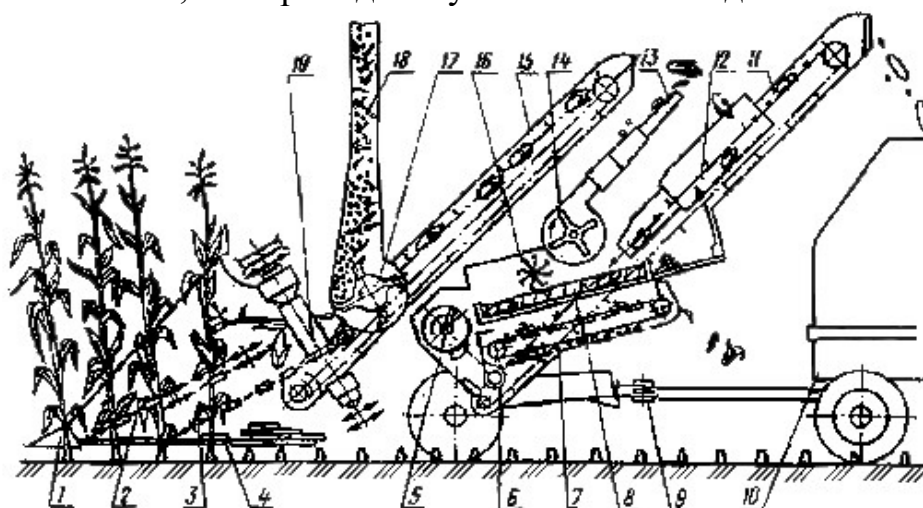
which increases productivity, reduces crop losses, and improves the quality of the finished product.

Key words. corn, harvesting, processing, combine harvester, agri-engineering, efficiency, product quality, crop loss reduction, waste management, environmental impact.

Кукуруза — это многолетняя культурная культура, широко используемая в пищевой, кормовой и технической промышленности. Из зерен кукурузы производят муку, сладкие початки, крахмал, кристаллический сахар, спирт и другие продукты. Кроме того, в восковом периоде зрелости зерен их можно употреблять в вареном виде или готовить консервы. Большое количество зерен кукурузы и ее стеблей в основном используется в качестве корма для скота.

Кукуруза принадлежит к семейству злаковых и является однолетней культурой, все разновидности которой относятся к виду **Zea mays**. Этот вид делится на семь разновидностей, включая кремниевый, зубовидный, взрывной, сахарный, крахмалистый, восковидный и покрытый. В Узбекистане культивируются все перечисленные разновидности кукурузы.

Одним из наиболее сложных и ответственных процессов в производстве кукурузы является ее сбор урожая. В ходе сбора початки остаются на стебле, что может привести к потере урожая и увеличению отходов. Кроме того, сбор стеблей затруднен, что иногда приводит к их оставлению на поле, что приводит к увеличению отходов.



1-трубный сепаратор; 2-подъемная цепь; 3-передающая цепь; 4 урожай аппарат; 5 и 6 винты; 7- снарядотранспортер; 8-сотовая чистота-аппарат для наращивания ресниц; 9-прицепной механизм; трейлер 10; 11 и 15 строфы транспортер; 12 наклонная доска; 13 труба; 14 вентилятор; 16 издание устройство; 17 шлифовальная машина; проводник 18 шахты; 19 распределительный щит.

Рисунок 1.1. Технологический образ комбайна КОП-1,4 «Херсонес-7»

В настоящее время в мире применяются различные технологии для сбора кукурузы. Для их реализации были разработаны различные машины, такие как КОР-1,4 "Хersones-7", ККР-3 "Хersones-9", ККР-2 "Хersones-10" и КСКУ-6 "Хersones-200" и другие. Их технические и эксплуатационные характеристики, а также показатели качества работы в условиях Узбекистана подробно описаны в литературе.

Одним из наиболее распространенных комбайнов является КОР-1,4 "Хersones-7", который представляет собой двухрядный прицеп с межрядным расстоянием 70 и 90 см и минимальным расстоянием между стеблями 20 см. Он предназначен для сбора кукурузы после полного созревания. Комбайн срезает стебли, отделяет початки от стеблей и очищает их от шелухи, загружает початки на прицеп, измельчает стебли и загружает их на транспортное средство, движущееся рядом.

Методология исследования основана на анализе существующих методов сбора и переработки кукурузы, а также на оценке их эффективности и применимости в условиях Узбекистана. В рамках исследования проведен обзор литературы, включая научные статьи, технические отчеты и исследования, касающиеся работы машин, таких как КОР-1,4 "Хersones-7", ККР-3 "Хersones-9", ККР-2 "Хersones-10" и других.

Результаты исследования показали, что использование новой схемы сбора и переработки кукурузы значительно повышает эффективность производственных процессов. В рамках проведенных полевых испытаний были оценены различные технологии и машины для сбора кукурузы, включая комбайны КОР-1,4 "Хersones-7", ККР-3 "Хersones-9" и ККР-2 "Хersones-10". Сравнительный анализ показал, что, хотя каждая из рассмотренных машин имеет свои преимущества, их использование может сопровождаться рядом сложностей, связанных с работой в полевых условиях Узбекистана.

Однако новая схема, разработанная на основе передовых технологий и адаптированная к местным условиям, показала значительное улучшение в производительности и качестве работы. Эта схема предусматривает более оптимизированное распределение ресурсов и использование современного оборудования для сбора и переработки кукурузы.

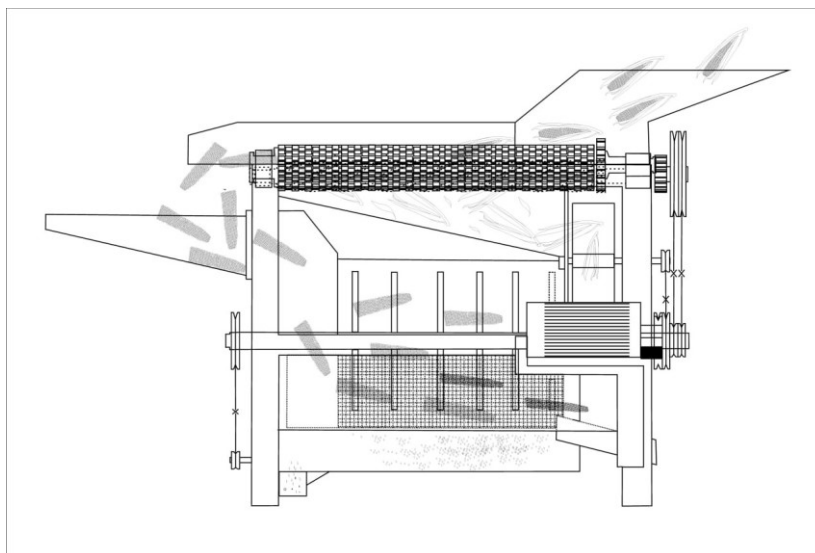


Рис 2. Предлагаемая схема для более эффективного метода управления отходами

Новая схема также включает более эффективные методы управления отходами, что способствует уменьшению экологического воздействия производства кукурузы. В целом, результаты исследования подтверждают перспективность использования новой схемы для повышения производительности и устойчивости производства кукурузы в Узбекистане.

В заключении исследования следует отметить, что анализ существующих методов сбора и переработки кукурузы, проведенный в рамках данного исследования, позволил выявить перспективные возможности для улучшения производственных процессов в агроинженерии Узбекистана. Изучение различных технологий и машин, таких как комбайны КОР-1,4 "Хersones-7", ККР-3 "Хersones-9" и ККР-2 "Хersones-10", а также их эффективность в условиях страны, показали как сильные стороны, так и потенциальные проблемы при эксплуатации.

Таким образом, исследование подтверждает необходимость дальнейших усилий в области агроинженерии для развития эффективных и устойчивых методов производства кукурузы в Узбекистане. Предложенная новая схема сбора и переработки кукурузы представляет собой перспективное направление для дальнейшего совершенствования агротехнологий и достижения более высоких результатов в производстве кукурузы.

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*Турдалиев З.
ассистент
Джизакский политехнический институт
Республика Узбекистан, г.Джизак
Ачилов Э.
ассистент
Джизакский политехнический институт
Республика Узбекистан, г.Джизак*

СОВЕРШЕНСТВОВАНИЕ ПРОЦЕССОВ ДРОБЛЕНИЯ И ОЧИСТКИ ПОЧАТКОВ КУКУРУЗЫ ДЛЯ ПОВЫШЕНИЯ ЭФФЕКТИВНОСТИ ПРОИЗВОДСТВА И КАЧЕСТВА ПРОДУКЦИИ

Аннотация. В статье рассматриваются методы дробления и очистки початков кукурузы с целью повышения эффективности производства и качества продукции. Анализ существующих технологий выявляет преимущества и недостатки различных подходов, включая барбанные и роторные дробилки.

Ключевые слова. Дробление початков кукурузы, очистка початков кукурузы, эффективность производства, качество продукции, барбанные дробилки, роторные дробилки.

*Turdaliev Z.
assistant
Jizzakh Polytechnic Institute
Republic of Uzbekistan, Jizzakh
Achilov E.
assistant
Jizzakh Polytechnic Institute
Republic of Uzbekistan, Jizzakh*

IMPROVING CORN COB CRUSHING AND CLEANING PROCESSES TO ENHANCE PRODUCTION EFFICIENCY AND PRODUCT QUALITY

Abstract. The article examines methods of corn cob crushing and cleaning to improve production efficiency and product quality. An analysis of existing technologies identifies the advantages and disadvantages of various approaches, including drum and rotary crushers.

Key words. corn cob crushing, corn cob cleaning, production efficiency, product quality, drum crushers, rotary crushers.

Кукуруза является одним из ключевых сельскохозяйственных культур в пищевой промышленности, используется также для кормов и технических целей. Из ее зерна получают муку, сладкие палочки, крахмал, кристаллизованный сахар, спирт и другие продукты. Стебель и початки кукурузы широко применяются как корма для скота.

Кукуруза принадлежит к семейству мятликовых и является однолетним растением. Все формы, культивируемые в Узбекистане, относятся к виду *Zea mays*. Этот вид подразделяется на семь типов: кремниевидная, зубовидная, лопающаяся, сахарная, крахмалистая, восковидная и кожистая.

Методология исследования, направленного на совершенствование процессов дробления и очистки початков кукурузы для получения чистого зерна, включает следующие этапы:

Исследование существующих технологий и оборудования: детальный анализ существующих методов дробления початков кукурузы, включая оценку их эффективности, энергоемкости и качества очистки зерна. Изучение различных видов дробилок, включая классические барабанные и роторные типы, с выявлением их преимуществ и недостатков.

Разработка экспериментальной установки: создание экспериментальной установки, состоящей из различных узлов и компонентов (загрузочных бункеров, дробильных барабанов, очистительных устройств и других элементов) для выполнения экспериментов с целью совершенствования процесса дробления початков кукурузы.

Проведение экспериментов: проведение серии экспериментов с использованием экспериментальной установки для оценки эффективности различных методов дробления и очистки початков кукурузы. Оценка параметров производительности, качества отделения зерна и энергии, потребляемой различными системами.

Анализ данных: анализ полученных результатов экспериментов для определения оптимальных параметров и режимов работы оборудования. Оценка качества отделения зерна, уровня повреждения зерен и производительности системы.

Разработка рекомендаций: на основе анализа данных формирование рекомендаций по оптимизации процессов дробления и очистки початков кукурузы. Включение в рекомендации оптимальных параметров оборудования, режимов работы и предложений по дальнейшим исследованиям.

Валидация результатов: проверка разработанных рекомендаций на практическую применимость и эффективность в условиях реального производства. Внесение корректировок в методологию и рекомендации при необходимости.

Документация и отчетность: оформление результатов исследования в виде научных публикаций, отчетов или рекомендаций для производителей сельскохозяйственного оборудования.

Результаты исследования показали, что существующие методы дробления и очистки початков кукурузы обладают различными достоинствами и недостатками. Барабанные и роторные дробилки обеспечивают высокую производительность и качество отделения зерна, однако имеют свои ограничения, такие как сложность конструкции и высокое потребление энергии.

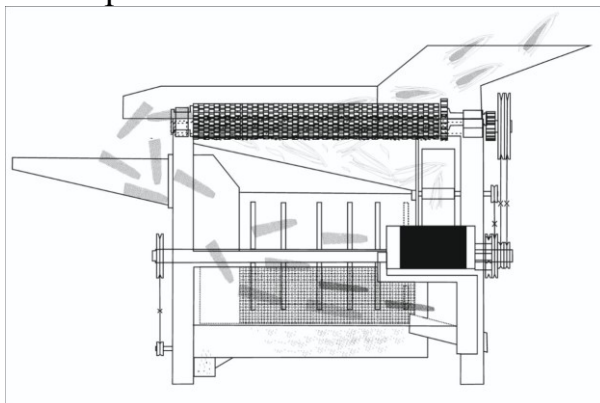


Рис. 1. Конструктивная схема разработанного оборудования.

В процессе исследования было выявлено, что использование разных типов аппаратов может приводить к различным степеням эффективности, качества очистки и повреждений зерен. Так, роторные дробилки, несмотря на их более сложную конструкцию, показали более высокую эффективность по сравнению с барабанными.

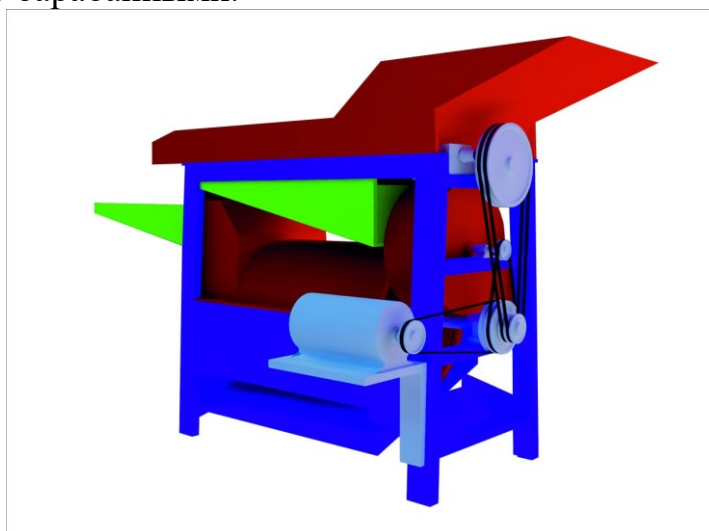


Рис. 2. 3D модель разработанного оборудования

Исходя из проведенного анализа, был сделан вывод о необходимости разработки нового устройства для дробления початков кукурузы, которое

сочетало бы в себе лучшие качества существующих методов и преодолевало бы их недостатки.

Реализация нового устройства будет способствовать повышению производительности и эффективности процессов переработки початков кукурузы, а также снижению затрат на электроэнергию и обслуживание. Это, в свою очередь, приведет к повышению прибыльности производства и качества готового продукта.

На основании анализа выявлена необходимость разработки нового устройства, которое сочетало бы в себе лучшие качества существующих методов и преодолевало бы их ограничения. Такое устройство должно быть эффективным, обеспечивать высокое качество отделения зерна, снижать повреждение зерен и оптимизировать энергопотребление.

Внедрение нового устройства позволит повысить эффективность переработки початков кукурузы, снизить затраты на электроэнергию и обслуживание, а также улучшить качество готового продукта. Это, в свою очередь, приведет к увеличению прибыльности производства и удовлетворению растущих потребностей рынка.

Таким образом, дальнейшие исследования и разработки в данной области могут способствовать повышению эффективности производства и улучшению качества продукции.

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*Туремуратова Г.И., кандидат биологических наук
доцент*

кафедра «Общей биологии и физиологии»

Косымбетова М.Б.

студент 2 курса магистратуры

специальность «Биология»

Каракалпакский государственный университет им. Бердаха

Республика Узбекистан

БИОМОРФОЛОГИЧЕСКИЕ ДАННЫЕ ЦИКЛОПОВ ОЗЕРА САЙКУЛЬ

Аннотация. В статье представлены результаты гидробиологических исследований ракообразных, циклопов озера Сайкуль. В данной статье впервые приведены результаты исследований Cyclopoida беспозвоночных животных озера Сайкуль. Преведени краткое сообщение малоизученных видов.

Ключевые слова: озеро, глубина, циклоп, Сайкуль, науплии, биомасса, глина, песок.

*Turemuratova G.I., candidate of biological sciences
associate professor*

Department of General Biology and Physiology

Kosymbetova M.B.

2nd year Master's student majoring in Biology

Karakalpak State University named after. Berdaha

The Republic of Uzbekistan

BIOMORPHOLOGICAL DATA OF CYCLOPSES OF LAKE SAYKUL

Annotation. The article presents the results of a hydrobiological study of crustaceans and cyclops from Lake Saykul. This article presents for the first time the results of studies of Cyclopoida invertebrate animals of Lake Saikul. Provide a brief account of little-studied species.

Key words: lake, depth, Cyclops, Saikul, nauplii, biomass, clay, sand.

Введение

Озеро Сайкуль расположено на правом берегу Амударьи, в 24 км южнее г. Нукуса. Озера расположено берега Амударьи питание осуществляется за счет реки р. Амударьи. Берега озера пологие, слабоизрезанные. Вода озера иногда используется на орошение

сельхозугодий и для поддержания водообеспеченности массивов лиманных сенокосов.

Одной из важных компонент водных экосистем Приаралья являются веслоногие ракообразные отряда Cyclopoidea. Циклопы являются важной составной частью кормовой базы промысловых рыб, причем их личинки - науплии - потребляются мальками рыб на самых первых стадиях развития (Богатова, 1980).

В экосистемах циклопы играют роль, как правило, консументов 1-го (науплии, младшие копепоиды, а также имаго многих видов) и 2-го (имаго и старшие копепоиды многих видов) порядка. Потребляя микроводоросли, детрит, простейших, коловраток, ракообразных Cyclopoidea оказывают существенное влияние на динамику процессов в водных экосистемах (Монаков, 1976).

Как и другие гидробионты многие виды циклопов характерны для определенных типов и состояний экосистем, так что по составу их сообществ можно судить о состоянии экосистем (Макрушин, 1974). Ведь лишь при достаточно точной видовой идентификации циклопов можно использовать в биоиндикации, паразитологии, исследовании процессов, протекающих в водных экосистемах. Поэтому циклопы являются ценным объектом при проведении экологического мониторинга водоемов, при биоиндикации.

Методы и материалы

Отбор гидробиологического материала по акватории оз. Сайкуль, проводились в 2022-2023 гг. Отбор проб планктонных животных проводили 3 раза весной, летом и осенью. Общее количество обработанных проб составляло 200 экземпляров. Пробы зоопланктона отбирали тотальным обловом толщи воды при помощи малой сетью Джели. На глубинах менее 1,5 м производили несколько протяжек сети от дна до поверхности. В сетях использовался мельничный газ № 70. Пробы фиксировали 4 % раствором формалина. Для более детального исследования состава зоопланктона и распределения его в водохранилище было установлено 4 станций, где брались месячные пробы. На каждой станции производились следующие наблюдения и измерения - прозрачность, температура воды у поверхности и дна.

Кислородный режим измеряли с помощью термодоксиметров, рН - с помощью универсального индикатора, прозрачность воды определяли с помощью диска Секки. Температуру воды измеряли водяным ртутным термометром.

Качественные пробы зоопланктона отбирали в пяти точках водохранилища с помощью качественной планктонной сети Апштейна с диаметром 18 см (газ №46), малой сети Джели с диаметром 18 см (газ №76).

Для определения горизонтального и вертикального распределения зоопланктона, для количественных сборов зоопланктона с различных

глубин использовали батометр Молчанова (5 л) и батометр Кожевникова-Дьяченко (10 л).

Собранные пробы планктонных животных в лабораторных условиях идентифицировались и подсчитывались с применением микроскопа МБС-10. Определение видового состава коловраток и ракообразных проводили под микроскопом, используя общепринятые определители [1,2,4,5]. Просчет организмов под микроскопом велся в определенной части пробы, последующим просмотром всего остатка для выявления крупных и редких особей.

Результаты и обсуждения исследования

Eucyclops serrulatus (Fischer, 1851) - длина тела 800-1100 мкм. Цвет желтоватый. Антеннулы 12-членистые, антенны 4-членистые. Гиалиновая пластинка последнего членика антеннул гладкая. Третий членик антенн несет 9 щетинок. P1-P4 трехчленистые. Слегка изогнутый внутренний шип Enp3P4 обычно несколько короче членика и в 1,4-1,6 раз длиннее внешнего шипа. L/W Enp3P4 2,5-2,8. Соединительная пластинка P4 несет шипики на поверхности и короткие сетулы по свободному краю. Внутренний край базисов всех торакальных ног с волосками, внутренний край базиса P1 несет длинную щетинку. P5 одночленистая с 1 шипом и 2 щетинками. Боковые края последнего торакального сегмента с густыми щетинками. Семяприемник бабочковидной формы. Внешний край фуркальных ветвей с шипиками вдоль большей части их длины. L/W фурки 4,0-6,0. Задние края абдоминальных сегментов зазубрены либо несут шипики. Основания s4 с шипиками. S1 заметно короче фурки и длиннее s4 и s5.

Встречается в оз. Сайкуль (июнь, август, сентябрь). Самка этого варианта отличается от типичных тем, что фуркальные ветви у нее значительно длиннее; они обычно превосходят длину двух последних абдоминальных сегментов вместе взятых. Фуркальные ветви параллельно или слабо расходятся. Зубчики (шипиками) на внешних краях фуркальных ветвей хорошо развиты, обычно занимают весь этот край, за исключением передней части. Иногда зубчики редуцированы, при этом они сохраняются только на задней части внешнего края ветви. Большинство наших экземпляров относится к формам, имеющим зубчики (шипиками) по всему внешнему краю фурки. Среди них иногда попадались особи с крупными зубчиками на нижней части внешнего края (рис. 1).

Характерным местообитанием этого варианта у нас являются озера, временные водоёмы и некоторые проточные рисовые поля, где вода постоянно прозрачная. На рисовых полях *E. serrulatus* обычно развивается только летом (с мая до октября). В течение лета здесь происходит несколько максимальных развитий рачка, при которых численность особей достигает 5000-8500 экз./м³.

В некоторых озерах встречается в довольно большом количестве. Однако он попадался здесь только в летних пробах (июнь, июль, август). *E.*

serrulatus и варианты этого вида считаются эвритермными (Рылов, 1948), однако они предпочитают водоемы типа родников, прудов с относительно низкой летней температурой воды -16-20-26°. Мы склонны считать его эвритермно-холодноводным. Вариант олиго- и мезосапробный.

Яйценозные самки обнаружены почти во всех пробах, включая зимние. Характерно, что особи, встречающиеся в прудах, отличаются высокой продуктивностью: количество яиц в яйценозных мешках в среднем 26-30, у многих экземпляров 36-40. Число яйценозных самок составляет 18-25% общего числа особей. Максимальное развитие этого варианта на рисовых полях наблюдается в июне, августе и сентябре, при этом численность особей увеличивается от 500 до 2550 экз./м³. Науплиусы на рисовых полях отмечены в июне, августе и сентябре. По-видимому, *E. serrulatus* во многих рисовых чеках полициклический.

Наши биотермические данные, составленные на основе измерения многих экземпляров из разных водоемов, показывают, что у описываемого варианта не наблюдается значительных колебаний в размерах тела половозрелых самок. Изменчивость наблюдается в размерах тела половозрелых самок. Изменчивость наблюдается в размерах цефалоторакса, генитального сегмента, абдомена, а также фуркальных ветвей.

Обитатель разнообразных, преимущественно мелких водоемов, часто загрязненных, а также мелководий озер. Отмечен также в реках и каналах, по всей Каракалпакии и Узбекистану. Один из самых обычных представителей циклопид нашей фауны. Космополитный вид.

Морфология особей из Каракалпакстана хорошо соответствует морфологии вида из Европы (Монченко, 1974; Einsle, 1993). Не исключено, что это сборный вид.

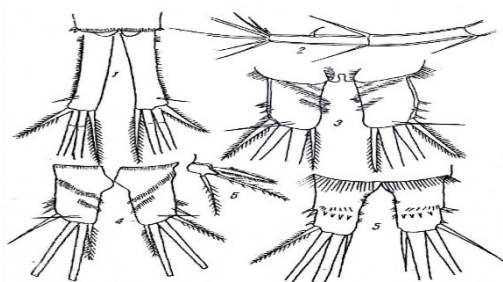


Рис.1. *Eucyclops serrulatus* (Fischer, 1851).

1- *Eucyclops serrulatus* 1- фурка самки 2 - последние членики I антенны, 3,4 — фурка самки, брюшная сторона, 5 – фурка самки, спинная сторона, 6 – ноги V пары самки.

Eucyclops macrurus (Sars, 1863)- длина тела 1100-1200 мкм. Общие очертания тела стройные. Антеннулы 12-членистые, сравнительно короткие. Гиалиновая пластинка последнего членика антеннул гладкая.

Третий членик антенн несет 9 щетинок. P1-P4 трехчленистые. Ровный внутренний шип EпрЗР4 длиннее членика и несколько длиннее внешнего шипа. L/W EпрЗР4 2,5-2,6. Внутренний край базисов торакальных ног с волосками. P5 одночленистая с 1 шипом и 2 щетинками. Внешний край фуркальных ветвей с несколькими шипиками у основания латеральной щетинки. Ветви фурки параллельные, длинные. L/W фурки 8,0-9,0. Задние края абдоминальных сегментов зазубрены либо несут типики. Основания s4 с шипиками. SI в 2,5-3,0 раз короче фурки и вдвое длиннее s4 и s5. Внутренний шип P6 самца примерно одной длины с внешней щетинкой и несколько длиннее средней щетинки (рис.2).

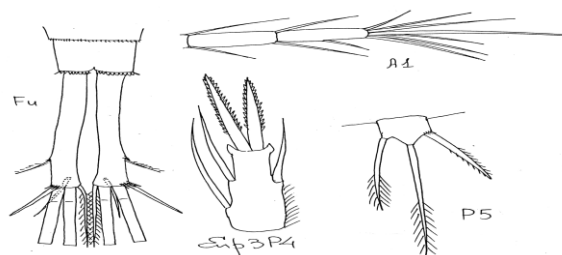


Рис. 2 Eucyclops macrurus (Sars, 1863).

Fu-фурка, A1-дистальных членика передней антенны, EпрЗР4-дистальный членик эндоподита IV-пары, P5-нога V пары.

Обитатель планктона озер, что находит подтверждение и в данных других исследователей (Рылов, 1948; Монченко, 1974). Представитель палеарктической фауны. Редок. Отмечен в озерах Сайкуль, Акшакуль, Атакуль Республики Каракалпакстан. В более южных регионах не отмечен. Морфология особей из Каракалпакстана хорошо соответствует морфологии вида из Европы (Монченко, 1974; Einsle, 1993). Ранее (Mirabdulley, Turemuratova, 1996) ошибочно указанный нами *Eucyclops macruroides* на самом деле является *Eucyclops macrurus*.

Заключение

Являясь компонентом естественной кормовой базы рыб, потребляя фито- и бактериопланктон, зоопланктон играет важную роль в функционировании водных экосистем. Немаловажную роль в структуре и функционировании планктоценозов играют циклопы: с одной стороны, потребляют микроводорослей, простейших, коловраток, микрограхообразных, с другой - сами являются пищей молоди рыб.

Таким образом в структуре зоопланктоценозов водоемов Каракалпакстана циклопы составляют обычно 25-60% биомассы озерного зоопланктона и 16-24% биоразнообразия зоопланктона озер и прудов.

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Уразов А.
эркин изланувчи
Алишер Навоий номидаги Тошкент давлат
ўзбек тили ва адабиёти университети
Ўзбекистон, Тошкент

ТОҒАЙ МУРОД АСАРЛАРИДА ТИЛ ВА УСЛУБНИНГ ЎРНИ

Аннотация. Ушбу мақолада Тоғай Мурод қиссалари ва романларида миллий характер, қадриятлар ва урф-одатларимизнинг ёритилишини тадқиқ этилади.

Тўй удумлари, кўпқари беллашувининг тартиблари, кураш ўтказиши билан боғлиқ одатлар, мавсумий маросимларга боғлиқ удумларни асарларида этнограф олимдек тасвирлаган. Тоғай Мурод асарларининг услубий бетакрорлиги шундаки, у жимжимадор сўзлардан фойдаланиб, нозик келишимли иборалар билан қаҳрамонлар қиёфасини бузмайди. Нимаики бўлса халқ тили билан ифодалайди. Шунингдек, адиб ўз асарларида мардлик, ор-номус, севги ва нафрат, жасурлик, адолат ва ноҳақлик, жисмоний ва руҳий баркамоллик, шахс ва халқ манфаатларининг тўқнашуви, мангулик ва фонийлик, хуллас инсоният ҳаётининг деярли барча қирраларини ишонарли ва ўзига хос тарзда тасвирлаб берган.

Таянч сўзлар: миллий характер, миллий қиёфа, услуб бетакрорлиги, урф-одатлар, образ, удумлар, мардлик, ор-номус, севги ва нафрат, халқона.

Urazov A.
free seeker
Tashkent state named after Alisher Navoi
University of Uzbek Language and Literature
Uzbekistan, Tashkent

THE ROLE OF LANGUAGE AND STYLE IN THE WORKS OF TOGAY MURAD

Abstract. This article examines the coverage of our national character, values and traditions in Togay Murad's stories and novels.

In his works, the ethnographer described the wedding rituals, the rules of the kopkari competition, the customs related to the wrestling, and the rituals related to the seasonal ceremonies. The stylistic uniqueness of Togay Murad's works is that he uses quiet words and does not spoil the image of the heroes with subtle concordant phrases. If anything, he expresses it in the language of the people. Also, in his works, the writer convincingly and uniquely described bravery, honor, love and hatred, courage, justice and injustice, physical and

mental perfection, conflict of personal and public interests, eternity and mortality, in short, almost all aspects of human life.

Key words: national character, national image, uniqueness of style, traditions, image, traditions, bravery, honor, love and hatred, folk.

XX аср адабиётида миллий қадриятлар ва урф-одатларни ёритиш адабиётшуносликнинг энг долзарб ва қизиқарли, шу билан бирга, энг мураккаб мавзуларидан бири бўлган. Бунинг ўзига хос сабаблари бор, албатта. Чунки мустабид тузум мафқураси ҳар бир ижодкорнинг ёзганларини қаттиқ назорат остига олар, миллий қадриятлар ва урф-одатларнинг қаламга олинишини нотўғри талқин этар, бундай ижодкорларга "миллатчилик" тамғаси босилиши ҳеч гап эмасди.

Бир умр ўз халқи ҳаётидан айри тушмаган, унинг дардларини асарларида ошкора баён этган, ҳақиқат ва адолатга садоқат билан хизмат қилиб келган ана шундай ёзувчилардан бири, шубҳасиз, Тоғай Муроддир.

Шу маънода олиб қараганда, XX асрнинг иккинчи ярмида ўзбек адабиётига шиддат билан кириб келган Тоғай Муроднинг дастлабки қиссаларида ўзбек халқининг миллий қадриятлари ва урф-одатлари янада жозибали ва тушунарли тасвирланиши адибнинг катта жасорати эди, дейиш мумкин.

Шундай экан, Тоғай Мурод қиссалари ва романларида миллий қадриятлар ва урф-одатларимизнинг ёритилишини тадқиқ этиш бу истеъдодли ёзувчининг ижодига янгича назар ташлашга, унинг асарларини чуқур тушунишга, шунингдек, миллий характер назариясини ишлаб чиқишга ҳисса қўшишга кўмаклашади.

Олимлар тўғри таъкидлаганидек, "Ҳар бир санъаткор ўз бадиий яратмаларида энг аввало эстетик қарашларини, эстетик ғоя ва эстетик идеалини илгари суради. Шунинг учун санъаткор ижодини унинг эстетик қарашлари билан боғлаб ўрганиш объектив илмий хулосалар чиқаришга имкон беради"¹.

Бусиз асар ўқувчини ишонтира олмайди, унда бадиий-эстетик тасаввур уйғота олмайди.

Бадиий адабиётнинг ўзига хос хусусияти шундаки, у инсон қалбининг энг яширин қатламларигача кириб бора олади, одамларга олам ҳақида билим бера олади, инсонларнинг дунё ҳақидаги тасаввурларини чуқурлаштира олади, ҳаётни ислоҳ қилишнинг энг кучли қуроли бўла олади. У ижтимоий онгнинг бошқа шакллари бўлмиш фалсафа, фан, ахлоқ, сиёсат, ҳуқуқ кабилар билан узвий алоқада.

Зеро ёзувчилик – худо берган истеъдоддир, бу касб билан ҳамма ҳам шуғулла олмайди. Буни касб сифатида бирор жойда ўқитиб, ўргатиб бўлмайди. Ёзувчиликнинг мактаби – бир умр ҳаётнинг ичида бўлиш. Ана

¹ Назаров Б. Ойбек эстетик қарашларининг шаклланишига доир //Ўзбек тили ва адабиёти.

шундагина унинг ёзганларини халқ севиб ўқийди, шундагина унинг қаҳрамонлари миллий характер сифатида тарих саҳифаларидан жой олади.

Мақолани ёзиш давомида шунга ишонч ҳосил қилдикки, XX асрнинг охири ва XXI асрнинг бошлари ўзбек адабиётидаги қисса ва романлар устида олиб борилган тадқиқот ишларида адибларнинг ижтимоий-фалсафий қарашлари, қаҳрамон ва унинг руҳияти муаммоси ҳамда баён усули кабилар ҳақида кўп фикрлар баён этилган¹.

"Бадий асарда характер яхлитлиги фақатгина ҳаётдаги кучли, яхлит шахсларни поэтикаштиришнинг айнан ўзи эмас, балки ахлоқий изланишлар, инсон қобилиятига ишонч туфайли юзага келадиган интилишлардан туғиладиган мураккабликни ҳам ўз ичига олади"².

Тоғай Мурод асар ёзишда, қаҳрамонлар характерини белгилашда уларнинг мақсад ва интилишларини таъминловчи воқеа-ҳодисаларни асарнинг марказига қўяди. Адиб яратган қаҳрамонлар характеридаги ўзига хос индивидуал хусусиятлар ва уларнинг дунёқарашига хос умумий жиҳатлар ўзаро мутаносиб ҳолда намоён бўлади.

Тоғай Мурод яратган қаҳрамонларнинг характерини ўзимизга ўхшаши, яшаш тарзимизга мос келиши, хатти-ҳаракатларининг табиийлиги, жонлилиги билан бошқалардан ажралиб туради. Ёзувчининг "Отандан қолган далалар" асарида бир образ бор. Бу образ асарда бир бора тилга олинади ва мана шу кичкинагина лавҳада унинг кимлиги, ички олами, ҳис-туйғулари тўла-тўқис намоён бўлади: "Оппоқ соч одам Қизил Байроқни директоримизга қайтариб беради. Қўлларини қорин қовуштириб-қорин қовуштириб туради.

– Болаларим, – дейди, – бизнинг юртга Амир Темурлар керак. Бизнинг юртга Бобурлар керак. Бизнинг юртга Улуғбеклар керак. Жуда, жуда керак! Аммо сизлар Темур бўлолмайсизлар, сизлар Бобур бўлолмайсизлар, сизлар Улуғбек бўлолмайсизлар. Лекин юртга тўрт мучали бус-бутун одамлар керак. Лекин юртга соғлом-соғлом одамлар керак. Шундай экан, ўзларингизни-ўзларингиз авайлангизлар, болаларим!"¹.

Асардаги бу қаҳрамон район халқ маорифи бўлими мудирини Дадабобоевдир. Дадабобоев айтмоқчики, сиз Амир Темур, Бобур ва Улуғбек авлодсиз. Ўтмишда шундай буюк аждодларимиз ўтган. Улар каби буюк бўлиш учун эса аввало саломатлик керак.

Тоғай Мурод учун ижоднинг асосий мавзуси бахтни моддий бойликдан эмас, турли тақдирлар, мураккаб инсоний муносабатлар

¹ Қаранг: Раҳимов А. Ўзбек романи поэтикаси: филол. фан. док. дисс. ... автореф. – Т., 1993; Имомова Г. М. Типик миллий характер яратишда бадий нутқнинг ўрни. филол. фан. ном. ... дисс. автореф. – Т., 1993; Тўраев Д. Ҳозирги ўзбек романларида бадий тафаккур ва маҳорат муаммоси (60-80-йиллар). филол. фан. док. ... дисс. автореф. – Т., 1994; Нурматов А. Бадий асарда полифонизм. филол. фан. ном. ... дисс. автореф. – Т., 1996; Солижонов Й. XX асрнинг 80-90-йиллари ўзбек насрида бадий нутқ поэтикаси. филол. фан. док. ... дисс. автореф. – Т., 2002.

² Бекмуродов Ю. Характер яхлитлиги // Ўзбек тили ва адабиёти. 1971 № 4. – Б. 3.

¹ Тоғай Мурод. Отандан қолган далалар. – Т.: Шарқ. – 1994. – Б. 62.

асосидан қидиришни англатади. Оддий одамлар ҳаётини, характерини очиб бериш – Тоғай Мурод ижодий маҳоратининг етакчи қиррасидир. Бу ўз-ўзидан бўлгани йўқ. У ана шу фазилатларни эгаллашга, ижодининг асосий йўналишига айлантиришга интилки. "Оддий", "халқдан чиққан" одамлар меҳри билан тасвирлаш ва "эскирган услублар"га содиқ қолмаслик унга дунёни аниқ кўришда ёрдам берди.

Одам ўз Ватанида унинг гўзалликлари, ўзгаришлари билан, ўз халқи ичида унинг ташвишлари, орзулари билан яшайди. Тоғай Мурод ижодида худди мана шундай қаҳрамонлар гавдаланган. Адиб уларнинг маънавий қиёфасини, характерини, руҳиятини баён қилиб бермайди, балки бу фазилатларни жонли тасвирлар орқали кўрсатади.

"Тоғай Мурод ижоди, – деб ёзади профессор Қ. Йўлдошев ўз тадқиқотларида, – ўзбек насри тараққиётида ўзига хос аҳамиятга эга. Ёзувчи шахсиятининг асарларига тўлиқ кўчиши, миллий руҳни теран англаш, ифода ўзгачалигини ташкил эта билиш, жонли тил тароватидан ўринли фойдаланиш ва колоритли юморга эгалик хусусиятлари адиб ижодининг ўзига хослигини белгилаган"¹.

Дарҳақиқат, Тоғай Мурод тўй удумлари, кўпкари беллашувининг тартиблари, кураш ўтказиш билан боғлиқ одатлар, мавсумий маросимларга боғлиқ удумларни асарларида этнограф олимдек ақс эттириб бера олган. Аммо бу тасвирлар асарларининг ҳеч бир жойида шунчаки фон учун ёки юзаки келтирилган эмас, балки ҳар доим асар қаҳрамонлари руҳиятига хос бўлган бирор жиҳатнинг очилишига қаратилган бўлади.

Тоғай Мурод тип, характер яратиш, ўткир конфликт ва ихчам сюжет туза олиш каби хусусиятларни пухта ўзлаштирган ижодкор ҳисобланади. Қолаверса, унинг асарлари халқ эртақларига хос содда, ихчам тасвир ҳамда ифода воситаларидан ижодий озиклана олган ижод намуналаридир.

Маълумки, бадиий асарда озми-кўпми тафсилот билан тасвир этилган персонаж образ ёки характер деб аталади. Характер (образ) инсоннинг типиклаштирилган ва индивидуаллашган тасвиридир.

"Аёлимиз даладан бош олиб кетайин, деди – кетолмади.

Бола азиз бўлди, ғўза боладан-да азиз бўлди!"².

Ушбу жумлада жуда кучли қочирим бор. У юзда табассум, дилда ғам-алам билан ифодаланган. Ўзбек аёллари азалдан болажон ва болапарвар бўлганлар. "Бола азиз одоби ундан азиз" ибораси ана шу миллий ғоя, миллий туйғуни ифодалайди. "Ғўза боладан-да азиз" ибораси эса, ана шу миллий ғоя ва туйғу устидан ўрнатилган социалистик меҳнат, пахта сиёсатининг якка ҳукмронлигига киноядир.

Муаллиф ҳаёт ҳақида нима демоқчи бўлса, шунинг ҳаммаси пировардида бадиий асарда тасвир этиладиган образларнинг туриш-турмушида, хулқ-атворида, психологияси, ишлари, интилишлари ва

¹ Йўлдошев Қ. Теранлик // Шарқ юлдузи. – Т., 2008. – 3-сон. – Б. 149.

² Тоғай Мурод. Отамдан қолган далалар. – Т.: Шарқ. – 1994. – Б. 187.

ўйларида ўз ифодасини топади.

"Отамдан қолган далалар" романида Деҳқонқул ҳаёти асардаги бошқа қаҳрамонлардан ортиқроқ қилиб тасвирланади. Аёли, онаси, раис каби кишиларга камроқ эътибор берилади, аммо адиб мақсадини баён қилишда, уларнинг ҳам "хизматидан" етарлича фойдаланади. Бу асарда Тоғай Мурод миллий характер сифатида ўзининг эстетик идеалини ифодаловчи Деҳқонқулдан фойдаланади. Асар бошидан Жамолиддин кетмоннинг сахнага чиқиши Деҳқонқул қисматининг бошланиши саналади. Чунки кетмон бу деҳқончилик рамзи. Жамолиддин кетмоннинг давомчиси эса Деҳқонқул. "Деҳқон" дея бош қаҳрамонга ном берилиши эса иккиламчи маънони ташийдди. Одатда биз деҳқон деганда файз баракали, қўли гул, оқ яктақларда, қўлида кетмон кўтариб, лўппиллаган ерда савлат тўкиб ишлаётган инсонни тушунамиз. Ўша пайтларда йигитларга Деҳқонбой, Деҳқонбек каби исмлар қўйилган. Лекин бу имсга "қул" қўшимчасининг қўшилиши асар қаҳрамони характеридан келиб чиқмаган. Деҳқонқул ўзбек деҳқон халқининг типик вакили. Қисмат ўзбек халқини қулга айлантиргани ва қулдек эзиб ишлатгани, хўрлагани ёзувчи томонидан рамзийлаштирилган. Шунинг учун асар қаҳрамони номига -бек, -бой эмас, балки -қул қўшимчаси қўшилган. Тоғай Мурод Деҳқонқул сиймосида ўзбек деҳқонининг миллий характерини мужассамлаштирган. Ундан кейин биринкетин, Ақраб кўрбоши, генерал Скобелев, мактаб директори, Зиёдга ўхшаш кўп характерларнинг ўқувчи кўз олдида шаклланиш жараёнини ҳикоя қилади ва шу восита билан адибнинг ғоявий мақсади юзага чиқа бошлайди. Асар давомида ҳар бир образнинг характерни аста-секин ёритиб борилади, натижада, характернинг миллий кўриниши бадий аксини топади.

Адабий мулоқотга киришаётган ижодкор тингловчига маълумот, янгиликни етказибгина қолмай, унга таъсир этиш, ҳаётини ёндашувга чорлаши лозим. Тасвирдаги қизиқарли, тасодифий, кескин жараёнлар ижросидаги ўзгаришни яққол намоён этади.

Ёзувчи бирор ҳаётини материални аниқ, изчил ривоят асосида бири-бирига боғлаб, воқеаларни ўзаро уюштириб олиб боради. Ёзувчи асарни ўқувчига баён қилар экан, унда ўқувчининг сўзларни ҳазм қилиш жараёни асосий планда туради. Асарнинг мазмуни ишонарли ва қизиқарли бўлса-ю, ёзувчи бунга баён қилишда дағалликка йўл қўйса, у воқеа ўз таъсирини йўқотади. "Бадий сюжет ҳаётини воқеалардан танлаб, териби олинади. Бу ишда ёзувчининг дунёқараши, асарда изҳор этмоқчи бўлган фикри – асар ғояси ва уни ифодаловчи характерлар ҳамда уларнинг мантиғи ҳал қилувчи роль ўйнайди"¹.

Ҳар бир ижодкорнинг тил воситаларидан ўзига хос фойдаланиш услуби мавжуд бўлади. Шу жиҳатдан олиб қараганда, унинг индивидуал услубини ўрганиш мураккаб жараён бўлиб, у ҳам адабий, ҳам лингвистик

¹ Адабиёт назарияси. Ж.1 – Т.: Фан, 1978. –Б. 263.

таҳлил имкониятларини ўзида мужассамлаштиради ва шу тарзда ижодий тафаккурнинг юзага чиқиш имкониятларини белгилайди.

Ҳар бир асар, албатта, ўз мазмун-моҳиятига кўра бошқаларидан ажралиб туради. Аммо, асар сюжетини бойитиш, композицион тузилишида воқеа-ҳодисаларни ўз ўрнида келтира олиш асарнинг бадиий етуқлигини таъминлайди.

Ёзувчи Тоғай Мурод ижодининг асосини ташкил қиладиган аксарият асарлари ана шундай бадиий пишиқ асарлар дейиш мумкин. Бу фикримизни Тоғай Мурод ижодига бағишланган тадқиқотлар натижалари ҳам тасдиқлайди.

Шу ўринда, адиб услубини шакллантиришда иштирок этувчи бадиий тасвир воситаларининг лисоний омиллари, воқеалар табиийлигини таъминлашдаги ўрни, ёзувчи услубидаги оҳанг характери тўғрисидаги фикрлар диққатга сазовордир. Бу фикрларда ёзувчи адабий услубининг ўзига хос жиҳатлари очиқ берилган.

М. Қосимова: "Аввало ёзувчи қисса ва романларидаги оҳанг характери ҳақида фикр юритиш керак бўлади. Боиси адиб асарларида насрий баён поэзия билан шу даражада яқинлашадики, "От кишнаган оқшом", "Ойдинда юрган одамлар" қиссалари ҳамда "Отамдан қолган далалар" романида ритм, оҳангдорлик энг муҳим омиллардан бири бўлиб қолди"³, деган фикрни илгари сурса, Й. Солижонов "Ҳатто шеър ритми, архитектуроникасига путур етказмаслик учун Тоғай Мурод Деҳқонкул нутқида келишиқ, шахс-сон ва эгалиқ кўшимчаларини ҳам ташлаб кетаверади"⁴, деб ёзган.

Бу эса "ёзувчи шеърый асарларга хос бўлган техник воситалар – ритм, вазн, туроқ кабилардан кенг фойдаланади"¹, деган фикрни исботлайди.

Демак "адибнинг ўзига хос ифода усули, индивидуал баён тарзи ҳам айнан ана шу оҳангдорликда кўринади. Шу сабабли бу хусусият алоҳида тадқиқот манбаи бўла олади"².

Тоғай Мурод адабиётга бамисоли бир эпкин олиб кирган ва кўп жиҳатдан халқ дoston ва термалари, мақол ва нақлларига ўхшаш шакли ихчам, мазмуни теран сўз-ибораларга бой бўлган оҳангдор тил ва туркона услубда ижод қилган. Чунки у адабиётда мана шу услуби орқали миллий қахрамонлар яратди ва бахшиёна тасвирлаш маҳоратини аниқ намоён эта олди.

Баъзи адабий танқидчилар томонидан ўзгача услуб дея эътироф этилган Тоғай Мурод асарлари ҳақида "сўзлари бежизга шеърдаги каби тагма-таг жойлаштирилмайди, сўз-гапларни кўп ишлатмайди. Асарларида

³ Қосимова М. Бадиий нутқ индивидуаллигининг лингвистик хусусиятлари (Тоғай Мурод асарлари асосида). Филол. фанлари номзоди ... дисс. автореф. – Т., 2007. – Б. 7–8.

⁴ Солижонов Й. XX асарнинг 80-90-йиллари ўзбек насрида бадиий нутқ поэтикаси: филол.фан.ном. ... дисс.автореф. –Т., 2002. –Б. 14.

¹ Қосимова М. Бадиий нутқ индивидуаллигининг лингвистик хусусиятлари (Тоғай Мурод асарлари асосида). Филол. фанлари номзоди ... дисс. автореф. – Т., 2007. – Б. 8.

² Тўлаганова У. Тоғай Мурод насрида ритм: Филол. фанлари номзоди ... дисс. автореф. – Т., 2005. – Б. 7.

ундов белгилари ва уч нуқталарнинг мўл-кўл қўлланиши ҳам бекорга эмас"³ дея тариф берилади.

Адиб жумла тузишда инверсия, ассонанс, аллитерация, такрор усулларидан қофиядош, маънодош, антоним, омоним сўзлардан маҳорат билан фойдаланади. Бўғинлар тенг бўлмаган ўринларда ҳам ритм мавжудлиги, фақат мисралар талаффузи жараёнида қисман қисқа ё узун талаффуз қилинишида фарқланиш кузатилади.

Баъзи ҳолларда ритм сатр бошидан охирига қадар аста-аста кўтарилиб борса, баъзан мисраларда, оҳангдаги бир хиллик сақланади. Бу жараёндан бахшилик санъатида ҳам ўринли фойдаланилади.

"Давлатинга болама-а, шодя шолтон ўрайман,

Оқ юзима сарғайиб жаҳаннамга қарайман.

Ажал келса боламай, менам бир кун нурайман

Мени десанг қулоқ солгин боламай-ай-ай-ай"².

"Отамдан қолган далалар"даги мана бу мисралар фикримиз исботидир:

"Кун олис бошим айланди.

Кун олис кўзим ёшланди.

Кун олис ичак-қорним томоғимда бўлди.

Ғарра-ғарра қусишдан армоним қолмади"¹.

Ушбу сатрларни ҳам дўмбира жўрлигида бахшиёна ҳассос нолалар билан ижро этса, бир дардли дostonдай наво бериши шубҳасиз.

Оддий сўзлар. Анаъанавий тарзда ёзиладиган сўзлардан адиб ўз услубида – бахшилик айтимлари усулидан фойдаланган. Мисралар тенглиги, қофиялар жойлашуви, ўқилишдаги ритми билан адиб маҳорати юзага чиққан.

Тоғай Мурод ўз асарлари учун материал тўплаганда, асарнинг қайси жанрда ёзилишини кўз олдига келтирган бўлса, ажаб эмас. Зеро, Тоғай Муроднинг ёзганларини бошқача тасаввур қилиш ҳам мумкин эмас. Сабаби, ўқувчиларни бир хилликдан чалғитиш мақсадида адиб мана шу йўлни танлаган бўлса керак. Унинг асарларини машҳур қилган нарса ҳам худди мана шу – унинг ўзига хос халқона услубидир.

Ёзувчи ўз асари материаллини шу даражада билиши керакки, лозим бўлса, мутахассис ҳам ундан фойдалансин. Тоғай Мурод асарлари ана шундай қўлланма бўла олди. Зеро, баъзи адабий танқидчилар Тоғай Мурод асарларида кераксиз маълумотлар (деталлар, жой номлари, урф-одатлар)га жуда кўп таърифлар берилган, кераксиз ўринларда фойдаланилган дея эътироз билдиришса-да, адибнинг китобхонга айтмоқчи бўлган гапларини шу йўл билан юзага чиқариши унинг ўзига хос услуби орқали силлиқланиб

³ Йўлдошов Қ. Теранлик //Шарқ юлдузи, 2008. – 3-сон. – Б. 149.

² Шоберди бахши тилидан ёзиб олинган "Авазхон" достонидан парча.

¹ Тоғай Мурод. Танланган асарлар. От кишнаган оқшом. – Т.: Шарқ, 2008. –Б. 111.

кетади. Чунки адибнинг ҳар бир асари ўзига хос санъатни ўзига хос маҳорат билан ёритиб бера олган.

Тоғай Мурод асарларининг услубий бетакрорлиги шундаки, у жимжимадор сўзлардан фойдаланиб, нозик келишимли иборалар билан қахрамонлар қиёфасини бузмайди. Нимаики бўлса халқ тили билан ифодалайди. Шунингдек, адиб ўз асарларида мардлик, ор-номус, севги ва нафрат, жасурлик, адолат ва ноҳақлик, жисмоний ва руҳий баркамоллик, шахс ва халқ манфаатларининг тўқнашуви, мангулик ва фонийлик, хуллас инсоният ҳаётининг деярли барча қирраларини ишонарли ва ўзига хос тарзда тасвирлаб берган.

Тоғай Муроднинг асарлари услуб жиҳатидан халқона тилда битилганлиги унинг жозибадорлигини таъминлаган. Бу билан Тоғай Мурод ўзидан олдинги ижодкорлар услубига зид бормади, у астойдил изланди, халқчил мазмунга халқчил ифода излади ва уни кашф этди.

Шуни алоҳида таъкидлаш керакки, Тоғай Мурод услубининг ўзига хослиги фақат унинг асарлари этнографик материаллар асосида яратилганида эмас, балки ёзувчининг бу материаллар устида ишлаш борасида ўзига хос йўли борлигидадир.

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*Усманова Р.
доцент
Каршинский государственный университет
Тошбоев С.Ш.
студент
Каршинский государственный университет*

**ГЕОГРАФИЧЕСКИЕ ПРОБЛЕМЫ ЗДОРОВЬЯ ЧЕЛОВЕКА В
УСЛОВИЯХ ИЗМЕНЕНИЯ КЛИМАТА (НА ПРИМЕРЕ
КАШКАДАРЬИНСКОЙ ОБЛАСТИ)**

Аннотация. В условиях изменения климата ряд проблем, связанных со здоровьем человека, являются одними из наиболее актуальных вопросов современности. Особенно в засушливых регионах существуют проблемы, связанные с неблагоприятным воздействием аномальных температур и ухудшением экологической ситуации из-за засухи на здоровье человека. В Кашкадарьинской области, расположенной в засушливом регионе, наблюдаются эпидемии болезней сердца, сосудов, органов дыхания, аллергии, опухолей, холеры, почек и др. заболеваемость увеличивается.

Ключевые слова: засушливый климат, здоровье человека, аномальная температура, голод, холера, эпидемическое заболевание, пестицид, гербицид.

*Usmanova R.
associate professor
Karshi State University
Toshboev S.Sh.
student
Karshi State University*

**GEOGRAPHICAL PROBLEMS OF HUMAN HEALTH UNDER
CLIMATE CHANGE (IN THE CASE OF KASHKADARYA REGION)**

Abstract. In the context of climate change, several problems related to human health are one of the most urgent issues of today. Especially in arid regions, there are some problems related to the negative impact of anomalous temperatures and the deterioration of the ecological situation due to drought on human health. In Kashkadarya region, which is located in an arid region, there are epidemics of heart, blood vessels, respiratory, allergy, tumor, cholera, kidney disease, etc. diseases are increasing.

Key words: arid climate, human health, abnormal temperature, famine, cholera, epidemic disease, pesticide, herbicide.

Введение. Жизнь и производственная деятельность человека происходят в пределах определенного ландшафта и между ними происходит непрерывное взаимодействие. В процессе этого взаимодействия ландшафт меняет свои природные свойства и приобретает новые характеристики. Актуальной стала проблема охраны, восстановления и улучшения ландшафтов в целом, то есть среды, в которой живет человек. В условиях изменения климата вопросы здоровья человека требуют анализа, научного обоснования и изучения.

Актуальность темы. В результате негативного воздействия человека на окружающую среду возникает ряд экологических проблем, таких как изменение климата, загрязнение атмосферы, истощение озонового слоя. Возникновение подобных глобальных проблем не только оказывает негативное воздействие на матушку-природу, но и представляет большую угрозу здоровью человека. По мнению экспертов Всемирной организации здравоохранения (ВОЗ), повышение температуры воздуха на нашей планете вызывает рост числа смертей от опасных инфекций и болезней, а также различных стихийных бедствий [6;].

Основная часть. Последствия изменения климата для здоровья значительны и включают сердечно-сосудистые заболевания, респираторные заболевания, инфекционные заболевания, недоедание, психические заболевания, аллергию, травмы, отравления и многое другое. Аномальные изменения климата вызывают заболевания, связанные со многими органами и системами человека. В частности, наблюдалось, что гипертермия вызывает эпидемии заболеваний головного мозга, сердца, почек, печени и почек. Особенно в длительных аномальных случаях из-за жары летних месяцев возрастает риск смерти от физического стресса, обезвоживания, солнечного удара, хронических заболеваний легких и других вредных воздействий. Эти показатели особенно наблюдаются среди людей старше 60 лет. Генеральный директор ВОЗ Т. Оценивая эту ситуацию, Гебреисус сравнил климатический кризис с кризисом здравоохранения [8;]. Повышение температуры Земли на 1,20 приводит к глобальному потеплению. Сегодня во многих странах мира из-за глобального потепления, засух и наводнений возникла нехватка продовольствия. Из-за нехватки питьевой воды и голода во многих странах в некоторых регионах наблюдается вспышка эпидемии холеры. По оценкам экспертов ВОЗ, около 222 миллионов человек в мире страдают от высокого уровня продовольственной безопасности, а 47 миллионов человек в африканских странах страдают от голода.

В связи с увеличением количества аномальных температур среди пожилых людей увеличивается смертность от связанных с жарой сердечно-сосудистых и респираторных заболеваний. Согласно данным, количество смертей, связанных с аномально высокими температурами среди взрослых, в 2019 году составило 345 000 человек по сравнению с более чем 70 000

европейцев, погибших во время европейской жары 2003 года. Ни для кого не секрет, что в июне 2015 года в Карачи (Пакистан) из-за жары (49°C) погибло более 2000 человек, а в США ежегодно из-за сильной жары умирает более 1300 человек.

Еще одной серьезной проблемой, вызывающей глобальные изменения климата, является увеличение содержания углекислого газа в воздухе и «парниковый эффект». Кроме того, экологические риски в сочетании с усиливающимися последствиями изменения климата и загрязнения воздуха будут сопровождаться в ближайшие годы стихийными бедствиями (наводнениями, землетрясениями и засухами, лесными пожарами и т. д.) с экстремальными погодными явлениями. В результате происходит рост числа инфекционных заболеваний и локальных эпидемий. Экологические риски усугубляются изменением климата и, как ожидается, будут увеличиваться из-за увеличения загрязнения воздуха.

Качество воды, состояние воздуха, почвенно-растительный мир, все природные ресурсы, необходимые для питания человека, имеют большое значение для здоровья людей. Всемирная организация здравоохранения отмечает, что около 80% всех заболеваний являются следствием экологических проблем [2; 33 с.]. В частности, по данным экспертов ВОЗ, 23% всех заболеваний и 25% всех видов злокачественных опухолей вызваны факторами окружающей среды. В Республике Узбекистан около двух тысяч крупных и средних промышленных предприятий, на которых работает более 70 тысяч человек, стационарные источники загрязнения выбрасывают в атмосферу более 150 вредных веществ, из которых 50 считаются наиболее опасными [6;].

При оценке экологического состояния Кашкадарьинской области в условиях изменения климата одной из важнейших задач является изучение загрязнений атмосферного воздуха и их влияния на здоровье человека [3; 89-191 с. 4; С. 199-201]. Сегодня медико-географические исследования проводятся по направлениям, направленным на оценку влияния окружающей среды на здоровье населения, прогнозирование и выявление природных очагов существующих заболеваний. Учитывая, что чистота окружающей среды во многом определяет здоровье человека, важна оценка и снижение распространения заболеваний в Кашкадарьинской области на основе изучения их происхождения. Хотя медицинская география сегодня является одной из важнейших областей исследования, географы по-прежнему сталкиваются с некоторыми препятствиями при сборе медицинских данных. Например, это связано с определением локализации заболевания, точной диагностикой заболевания и т. д. Благодаря усилиям Всемирной организации здравоохранения, других организаций и местных органов власти географы могут с большой точностью отслеживать распространение болезней.

Глобальные и региональные климатические изменения на территории Узбекистана. В ближайшие годы ожидается повышение среднегодовой температуры в нашей республике на 2-30°C в северных регионах и на 10°C в южных регионах. Это становится причиной вспышки некоторых заболеваний. Весной и осенью в организме населения создаются благоприятные условия для обитания и развития болезнетворных бактерий. В эти периоды среднесуточная температура выше +5°C способствует развитию многих инфекционных паразитарных заболеваний. В частности, можно отметить, что такие инфекционные заболевания, как бешенство, бруцеллез, корь, широко распространены в горных и предгорных районах Кашкадарьинской области, в регионах, специализирующихся на животноводстве [5; 223-227 с.] Кашкадарьинская область – один из регионов Узбекистана, где расположены крупные промышленные предприятия. В Кашкадарьинской области важную роль в загрязнении атмосферного воздуха играют выбросы промышленных предприятий и автотранспорта.

По статистике, в Кашкадарье добывается 70% газа, 78% нефти и более 80% газового конденсата. Промышленность в этой сфере развивается очень быстро. В частности, важное место в нашей республике занимают Шортанский нефтегазовый, Шортанский газохимический комплекс, Мубаракский газоперерабатывающий завод, Дехканабадский завод калийных удобрений, Таллимарджонский КЭС и другие крупные промышленные предприятия [1; 133 с.].

Среди отраслей Кашкадарьинской области особое место занимают газохимическая, газоперерабатывающая промышленность. Нефтегазовая отрасль является одной из экологически опасных отраслей и оказывает большое негативное влияние на здоровье человека. Ведь доказано негативное влияние различных химических реагентов при бурении нефтяных и газовых скважин, добычи сырья, производства готовой продукции, а также углеводородов, образующихся в технологическом процессе для органов дыхания и их смесей, на флору и фауны, так и на человеке.

Если количество выхлопных газов, выходящих из этих промышленных предприятий, будет выше нормы, это окажет негативное влияние на здоровье человека и вызовет рост заболеваний. Позже, при добыче вышеуказанного количества серы, газового конденсата и других веществ на Мубаракском газоперерабатывающем заводе наблюдается выброс в атмосферу большого количества токсичных газов. По данным увеличения содержания токсичных газов в атмосферном воздухе, воздействие газа, смешанного с серой, можно ощутить на расстоянии до 50-60 километров. В частности, это оказывает негативное влияние на здоровье жителей Мубаракского, Касбийского и Косонского районов, сельскохозяйственные культуры, домашний скот, а также сухую и жаркую

Каршинскую степь. В результате установлено, что указанные промышленные предприятия выбрасывают в атмосферу углеводороды, окись углерода, оксиды серы, сероводород, ангидрид.

В промышленных центрах и промышленно развитых городах Кашкадарьинской области токсичные газы и вещества, выделяющиеся в результате добычи полезных ископаемых и переработки, эксплуатации заводов, бензопириновые вещества, выделяющиеся из автомобилей, радиоактивные вещества, вызывают рак легких в организме человека. В частности, в организме людей, проживающих вокруг месторождений полезных ископаемых, наблюдаются негативные состояния, в результате чего в таких регионах растет ряд групп заболеваний, в том числе опасная астма, некоторые заболевания, связанные с органами дыхания.. Из-за применения пестицидов и гербицидов, предназначенных для повышения плодородия земель в освоенных сельскохозяйственных районах, можно наблюдать случаи отравления организмов местного населения, а в некоторых случаях даже летальный исход.

Определено загрязнение воздуха Карши, Косона, Мубарака и других промышленных городов Кашкадарьинской области пылью, фтористым водородом, сернистым газом, оксидами углерода и водорода. По данным управления статистики Кашкадарьинской области, [7;] в среднем 320 тыс. т в год от источников загрязнения атмосферного воздуха. в атмосферу выбрасывается больше различных вредных веществ. 212,4 тыс. тонн этого показателя. si к промышленному производству, 108,2 тыс. тонн. соответствует источникам транспорта. По данным Кашкадарьинского областного управления статистики, 56,4% умерших в 2018 году составили от болезней системы кровообращения, 8,7% от опухолей, 6,6% от несчастных случаев, отравлений и травм, 6,6% от болезней органов пищеварения, 4,1% умерли. от болезней органов дыхания, 1,2% от инфекционных и паразитарных болезней, 16,4% от других болезней [1; 133 с.]. К комплексу мероприятий, разработанных и реализуемых управлением экологии и охраны окружающей среды Кашкадарьинской области по борьбе с загрязнением атмосферного воздуха - создание новых типов двигателей для автомобилей, которые являются одним из основных источников загрязнения атмосферного воздуха, перевод их на технологически чистое топливо. размещение загрязнителей атмосферного воздуха всех предприятий за пределами города, строгий запрет на размещение производственных предприятий вблизи друг друга и т.д.

Краткое содержание. Необходимо разработать меры по предотвращению негативного воздействия повышенного загрязнения атмосферы на здоровье человека во всех видах производственной деятельности предприятий нефтегазовой отрасли Кашкадарьинской области, оснастить промышленные предприятия устройствами на основе современной технологии газоочистки. В целях предотвращения глобальных

изменений климата, снижения количества вредных отходов, выбрасываемых в атмосферу, применять меры по предотвращению загрязнения воды и почвы различными отходами, развивать организацию санитарно-защитных зон на промышленных предприятиях и населенных пунктах, постоянный мониторинг загрязнения атмосферного воздуха в жилых массивов, целесообразно организовать агитацию среди населения.

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*Хайдаров Т.Т.
Джизакский политехнический институт
Узбекистан, Джизак*

ЗАДАЧА УПРАВЛЯЕМОСТИ ДЛЯ ОДНОГО КЛАССА ДИНАМИЧЕСКИХ СИСТЕМ С ПАРАМЕТРАМИ

Аннотация. В работе рассматривается динамическая система управления со структурным параметром и с неточно заданным начальным состоянием. Изучена задача оптимизации для одного типа негладкого терминального функционала. Получены необходимые и достаточные условия оптимальности.

Ключевые слова: динамическая система, задача управления, параметр системы, негладкий функционал, условия оптимальности.

*Khaidarov T.T.
Jizzakh Polytechnic Institute
Uzbekistan, Jizzakh*

CONTROLLABILITY PROBLEM FOR ONE CLASS OF DYNAMIC SYSTEMS WITH PARAMETERS

Annotation. The paper considers a dynamic control system with a structural parameter and an inaccurately specified initial state. An optimization problem for one type of nonsmooth terminal functional is studied. Necessary and sufficient optimality conditions are obtained.

Keywords: dynamic system, control problem, system parameter, nonsmooth functional, optimality conditions.

В результате исследований задач оптимизации, связанных с проблемами управления сложных систем и принятия решения в условиях неопределенности, развиваются методы негладкой оптимизации, негладкого и многозначного анализа [1–4]. Одним из подходов, приводимых к негладким задачам оптимизации, является принцип минимакса [3]. Модели динамических систем в виде управляемых дифференциальных включений представляют большой интерес в проблемах управления и принятия решения в условиях информационных ограничений. Для таких моделей изучаются негладкие задачи оптимального управления ансамблями траекторий [4,5,6].

Рассмотрим динамическую систему управления с параметрами вида

$$\dot{x} = A(t, y)x + b(t, u, y), t \in T = [t_0, t_1], x(t_0) \in D, u \in V(y), y \in Y, (1)$$

где x – n -вектор состояния, u – m -вектор управления, y – k -мерный параметр, $A(t, y)$ – $n \times n$ -матрица, $b(t, u, y)$ – n -вектор функция. В данной

системе управления информация о начальном состоянии системы ограничена тем, что известно только выпуклое компактное множество $D \subset R^n$ возможных начальных состояний. В процессе управления участвует параметр $y \in Y$, значение которого сохраняется постоянным в рассматриваемом отрезке времени $T = [t_0, t_1]$. Область значений управления $u = u(t)$ является выпуклым компактным подмножеством $V(y)$ пространства R^m , непрерывно зависящим от параметра $y \in Y$. Множество Y также будем считать компактным подмножеством пространства R^k .

Относительно правой части дифференциального уравнения (1) будем предполагать, что выполнены следующие условия:

1) элементы матрицы $A(t, y)$ суммируемы по $t \in T$ и непрерывны по $y \in Y$, причем $\|A(t, y)\| \leq \alpha(t)$, $\alpha(\cdot) \in L_1(T)$;

2) каждая компонента n -вектор функции $(t, u, y) \rightarrow b(t, u, y)$ измерима по $t \in T$ и непрерывна по $(u, y) \in V \times Y$, причем $\|b(t, u, y)\| \leq \beta(t)$, $\beta(\cdot) \in L_1(T)$.

Допустимыми управлениями для системы (1) будем считать каждую измеримую ограниченную m -вектор-функцию $u = u(t)$, $t \in T$, принимающие почти всюду на T значения из $V(y)$ при некотором $y \in Y$. Обозначим через $U_T(y)$ – множество допустимых управлений $u = u(\cdot)$, таких, что $u(t) \in V(y)$, $t \in T$. Обозначим через $H_T(u, y)$ – множество всех абсолютно непрерывных траекторий, соответствующих допустимому управлению $u \in U_T(y)$ и параметра $y \in Y$. Согласно результатам работ [5,6] при заданных условиях $H_T(u, y)$ является выпуклым компактным множеством в пространстве непрерывных n -вектор-функций $C^n(T)$.

Пусть качество управления динамической системой (1) оценивается негладким терминальным функционалом

$$J(x(\cdot), y) = \sum_{i=1}^l \max_{z \in Z_i} (P_i(y)x(t_1), z),$$

где $P_i(y)$ – $s \times n$ -матрица, непрерывно зависящая от параметра $y \in Y$, Z_i – замкнутое ограниченное множество из R^s . Для системы (1) рассмотрим следующую максиминную задачу:

$$\min_{x(\cdot) \in H_T(u, y)} J(x(\cdot), y) \rightarrow \max_{u \in U_T(y), y \in Y} . \quad (2)$$

Будем изучать необходимые и достаточные условия оптимальности для максиминной задачи (3).

Рассмотрим множество, состоящее из концов всех траекторий $x(\cdot) \in H_T(u, y)$ в момент времени $t_1 > t_0$:

$$X_T(t_1, u, y) = \{\xi \in R^n \mid \xi = x(t_1), x(\cdot) \in H_T(u, y)\}.$$

В силу результатов работы [5] $X_T(t_1, u, y)$ является выпуклым компактом из R^n .

Положим: $\sigma(X, \psi) = \min_{\xi \in X} (\xi, \psi)$. Функционал $G(u(\cdot), y) = \min_{x(\cdot) \in H_T(u, y)} J(x(\cdot), y)$ имеет следующее представление:

$$G(u(\cdot), y) = \max_{z_i \in \text{co}Z_i, i=1, l} \sigma(X_T(t_1, u, y), \sum_{i=1}^l P'_i z_i), (3)$$

где $\text{co}Z_i$ – выпуклая оболочка множества Z_i .

Учитывая формулу (3), максиминную задачу (2) можно записать в следующем виде:

$$\max_{z_i \in \text{co}Z_i, i=1, l} \sigma(X_T(t_1, u, y), \sum_{i=1}^l P'_i(y) z_i) \rightarrow \max_{u(\cdot) \in U_T(y), y \in Y} . (4)$$

Таким образом, максиминная задача (2) сводится к задаче повторной максимизации вида (4). Она является задачей оптимального управления терминальным состоянием ансамбля траекторий динамической системы (1).

Множество $X_T(t_1, u, y)$ имеет следующее представление:

$$X_T(t_1, u, y) = F_y(t_1, t_0)D + \int_{t_0}^{t_1} F_y(t_1, \tau) b(\tau, u(\tau), y) d\tau .$$

где $F_y(t, \tau)$ – фундаментальная матрица решений уравнения $\dot{x} = A(t, y)x$. Имеем:

$$\sigma(X_T(t_1, u, y), \psi) = \sigma(F_y(t_1, t_0)D, \psi) + \int_{t_0}^{t_1} (F_y(t_1, \tau) b(\tau, u(\tau), y), \psi) d\tau .$$

Рассмотрим функцию:

$$\gamma(y, z) = C(D, \psi(t_0, y, z)) + \int_{t_0}^{t_1} \max_{v \in V(y)} (b(t, v, y), \psi(t, y, z)) dt, y \in Y, z = (z_1, z_2, \dots, z_l), z_i \in \text{co}Z_i$$

где $\psi(t, y, z) = F'_y(t_1, t) \sum_{i=1}^l P'_i(y) z_i, z = (z_1, z_2, \dots, z_l)$.

Теорема. Для оптимальности управления $u^0(\cdot)$ и параметра y^0 в задаче (3) необходимо и достаточно существование $z^0 = (z_1^0, z_2^0, \dots, z_l^0), z_i^0 \in \text{co}Z_i$ такой, что $\max_{z_i \in \text{co}Z_i, i=1, l} \gamma(y^0, z) = \gamma(y^0, z^0)$ и выполнение следующих условий:

$$\max_{z_i \in \text{co}Z_i, i=1, l} \gamma(y^0, z) = \max_{y \in Y} \max_{z_i \in \text{co}Z_i, i=1, l} \gamma(y, z), (5)$$

$$\max_{v \in V(y^0)} (b(t, v, y^0), \psi(t, y^0, z^0)) = (b(t, u^0(t), y^0), \psi(t, y^0, z^0)) \text{ п.в. на } T . (6)$$

Полученные необходимые и достаточные условия оптимальности дают теоретическое обоснование метода построения решения задачи (2) с помощью решения конечномерных задач вида (5) и (6). Конечномерную задачу минимизации функции (6) можно решить методами математического программирования. Таким образом, решение рассмотренной в работе негладкой задачи оптимального управления приводится к решению задач конечномерной оптимизации.

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*Хайитов Ж.Х.
“Рақамли иқтисодиёт” кафедраси ассистенти
Самарқанд иқтисодиёт ва сервис институти*

ОБОДОНЛАШТИРИШ ХИЗМАТЛАРИНИ КЎРСАТИШ ТИЗИМИНИНГ ХОРИЖ ТАЖРИБАСИ

Аннотация. Ушбу мақолада ободонлаштириш хизматларига алоҳида эътибор қаратилган бўлиб, қаттиқ маъшій чиқиндиларни ташиб кетишни ташиқил этиши ва улардан фойдаланиши соҳасида хусусий тадбиркорлик фаолиятини янада ривожлантириши борасида ҳали ҳал этилмаган қатор муаммолар мавжудлиги ҳамда ушбу муаммоларга алоҳида эътибор қаратиши муҳимлиги бўйича таклифлар ва тавсиялар берилган.

Калит сўзлар: ободонлаштириш хизматлари, атроф-муҳит, ижтимоий барқарорлик, режалаштириши, коммунал қурилиши, уй-жой ва ер.

*Khaitov J.Kh.
assistant
department of “Digital economy”
Samarkand Institute of Economics and Service*

FOREIGN EXPERIENCE OF THE PROVISION OF LANDSCAPE SERVICES SYSTEM

Abstract. In this article, special attention is paid to beautification services, suggestions and recommendations are given on the existence of a number of unsolved problems in the further development of private entrepreneurship in the field of organization of transportation of solid household waste and their use, as well as the importance of paying special attention to these problems.

Keywords: Development services, environment, social sustainability, planning, public construction, housing and land.

Ҳар бир шаҳарнинг кундалиқ фаолиятини таҳлил қилиш бу ўша шаҳардаги бир қанча ечимини кутиб турган муаммоларга дуч келишдир. Энг эътиборли томони шундаки, ободонлаштириш хизматларининг ривожланиши бу давлатнинг иқтисодий ва ижтимоий барқарорлигини ифода қилишнинг асосий кўрсаткичларидан бири ҳисобланади. Бироқ ободонлаштириш тизими тармоғини ривожлантиришнинг энг муҳим муаммоларидан бири, бу бугунги кунда ушбу тармоқни такомиллаштиришга эътиборнинг камлигидадир. Шу сабабли эътибор қаратадиган бўлсак, мамлакатимизнинг барча шаҳарлари ва туман марказлари бир-биридан сезиларли даражада фарқ қилади.

Дунёнинг барча ривожланган мамлакатлари учун шаҳарлардаги, айниқса мамлакат пойтахтларидаги экологик тозалик барча даражадаги расмий ҳокимият органлари, сиёсий партиялар, ижтимоий ҳаракатлар, оммавий ахборот воситалари ва шу билан биргаликда аҳолининг алоҳида эътибор марказида бўлади.

Шаҳарларни ободонлаштириш ҳамisha энг долзарб вазифа сифатида намоён бўлган. Ободонлаштириш сўзини икки хил маънода тушуниш мумкин: тор маъно ва кенг маънода.

Биринчидан, тор маънода – уй–жой, ҳовли ва фақатгина бир кишига ёки оила аъзоларига тегишли бўлган ҳудуд.

Иккинчидан, кенг маънода – режалаштириш, коммунал қурилиш, уй–жой ва ер масалалари, йўлақлар, шаҳарнинг яшил майдонлари, кўчаларни парвариш қилиш, кўча транспорти, шаҳар алоқалари, шаҳар ёритилиши, иситиш, шаҳар экологияси, пиёдалар қатнови зич бўлган ва кам бўлган йўлақлар шулар жумласидандир.

Шаҳарларни ободлиги, бу ўша шаҳарнинг ижтимоий-иқтисодий аҳволини, даражасини акс эттирадиган “ойна”дир, шунинг учун ривожланган мамлакатларда мамлакат ободлиги, унинг экологик вазиятлари тўғрисидаги маълумотлар жамоатчиликка очик бўлиши ва жамиятнинг сиёсий ва ижтимоий ҳаётида етакчи ўринлардан бирини эгаллаши бежиз эмас албатта.

Йилдан-йилга аҳоли сонининг ўсиши, шаҳарларни катталашиши саноатнинг ривожланиши, буларнинг барчаси шаҳар ободончилигига, атроф – муҳитни тоза сақлаш муаммосини пайдо бўлишига, инсонлар ҳаёти ва фаолияти учун етарли шароитларни яратиб беришдаги кичик–кичик кўз илғамас тўсиқларни пайдо бўлишига сабаб бўлмоқда. Сўнгги ўн йилликларни кўздан кечирар эканмиз, инсонларни атроф-муҳитга ва хусусан шаҳарлар ободончилигига салбий таъсири сезиларли даражада ошганлигига гувоҳ бўламиз.

Бугунги кунда бутун дунёда чиқиндиларнинг инсонлар ҳаёти ва соғлиғига, атроф-муҳитга зарарли таъсирининг олдини олиш, чиқиндилар ҳосил бўлишини камайтириш ва улардан хўжалик фаолиятида оқилона фойдаланилишини таъминлашга қаратилган катта лойиҳалар амалга оширилмоқда. Сабаби ҳар йили дунё бўйлаб 2 миллиарддан ортиқ каттик маиший чиқинди ҳосил бўлади ва улардан камида 33 фоизи экологик жиҳатдан хавфсиз бўлмаган усуллар билан қайта ишланади. Ўртача киши бошига кунлик тўғри келадиган маиший чиқинди 0,74 кгни ташкил этади, ҳудудлар кесимида унинг қуйи ва юқори чегаралари 0,1 дан 4,5 кг оралиқда тебраниб туради. Шарқий Осиё ва Тинч океани ҳудудида дунё чиқиндисининг 23 фоизга яқин қисми шакланса, бу кўрсаткич Яқин Шарқ ва Шимолий Африка давлатларида энг кам – 6 фоизни ташкил этади.

Кўпгина давлатларда каттик маиший чиқиндини қайта ишлашда бир неча давлат бошқарув даражалари иштирок этиб, маҳаллий даражадаги

органлар асосий ўринни эгаллайди. Маҳаллий органлар чиқиндиларни тўплашда, ташишда ва қайта ишлашда муҳим аҳамият касб этади. Улар, шунингдек чиқиндини олиб кетиш учун тўлов миқдорини белгилаш ваколатига эга бўлиши мумкин, чиқиндиларни йўқ қилиш, қайта ишлашга лицензия ва рухсатнома бериш аксарият ҳолларда давлат ёки унинг ҳудудий ваколатли органлари томонидан амалга оширилади.

Бугунги кунда бутун дунёда чиқиндиларнинг инсонлар ҳаёти ва соғлиғига, атроф-муҳитга зарарли таъсирининг олдини олиш, чиқиндилар ҳосил бўлишини камайтириш ва улардан хўжалик фаолиятида оқилона фойдаланилишини таъминлашга қаратилган катта лойиҳалар амалга оширилмоқда. Сабаби ҳар йили етти миллион киши ҳаво ифлосланиши таъсирида вафот этади. Турли газлар таъсирида ифлосланишлардан келиб чиқадиган касалларни даволаш учун ҳар йили 1 триллион доллардан зиёд маблағ сарф этилади. Ҳавони ифлосланиши нафақат аҳоли саломатлигига, балки атроф – муҳит учун ҳам жиддий таҳдидларни ҳам келтириб чиқармоқда. Бу ўз – ўзидан дарё, океанларда кислородни камайтиради, биологик хилма – хилликни камайтиради шу билан биргаликда иқлим ўзгаришларига ҳисса қўшади.

Ер юзидаги аҳоли пунктларида мавжуд бўлган аҳоли сони, иқлимий, жуғорфий ва бошқа ижобий ва салбий шароитлардан қатъий назар ўзлари учун зарур бўлган санитария–гигиеник шароитларни ва аҳолининг меҳнати, маиший турмуши ҳамда дам олишлари учун зарур қулайликларни юксак даражада таъминлашлари учун ободонлаштириш хизматларидан фойдаланмасликнинг иложи йўқ. Мамлакат ободлиги ижтимоий-иқтисодий ҳолатини акс эттирувчи “ойна”дир, шунинг учун ривожланган ва ривожланаётган мамлакатларнинг ободлиги, экологик вазиятлари ҳақидаги маълумотлар оммага очиқ бўлиши ва етакчи ўринлардан бирини эгаллаш бежиз эмас. Шундай экан ободонлаштириш жамиятнинг сиёсий ва ижтимоий ҳаётдаги ўрнини белгилаб беради деб бемалол айта оламиз.

Кўпгина давлатларда қаттиқ маиший чиқиндини қайта ишлашда бир неча давлат бошқарув даражалари иштирок этиб, маҳаллий даражадаги органлар асосий ўринни эгаллайди. Маҳаллий органлар чиқиндиларни тўплашда, ташишда ва қайта ишлашда муҳим аҳамият касб этади. Улар, шунингдек чиқиндини олиб кетиш учун тўлов миқдорини белгилаш ваколатига эга бўлиши мумкин, чиқиндиларни йўқ қилиш, қайта ишлашга лицензия ва рухсатнома бериш аксарият ҳолларда давлат ёки унинг ҳудудий ваколатли органлари томонидан амалга оширилади.

Мамлакатни ободонлаштириш ва чиқиндиларни олиб чиқиб кетиш хизмати нархлари турли ғорижий давлатларда турлича белгилаб олинган: АҚШда ягона тарифга асосан, Канадада идиш ҳажмига қараб, Сеулда умумий тўловда ва бошқалар.

АҚШ шаҳарларида чиқиндини олиб кетиш одатда ягона тариф бўйича амалга оширилади. Ушбу хизматнинг ўртача ойлик нархи 9 дан 70 АҚШ

долларгачани ташкил қилади. Чикагода жойлашган турар-жой биноларида яшовчи аҳоли Кўчалар ва санитария департаменти томонидан тақдим этиладиган чиқиндини ташиш хизмати учун ҳар бир турар-жойга ўртача ойлик 9,5 АҚШ доллари миқдоридан пул тўлайди. Мазкур сумма сув ва канализация хизматлари билан биргаликда умумий умумий коммунал тўлови таркибига киритилган.

Канаданинг Торонто ва Австралианинг Сидней шаҳарларида чиқинди идишининг хажмига қараб тўловлар амалга ошириладиган тарифлар дастури амал қилади. Тўлов миқдори 270-516 АҚШ долларини ташкил этиб, унга аҳолини чиқиндисини олиб кетиш, кўча чиқиндиларини, органик, габарити катта бўлмаган ва металл жисмларни ҳамда эски электроника буюмларини тўплаш, қайта ишлаш киради.

Амстердамда чиқинди учун тўлов оилада яшовчи фуқаролар сонига қараб амалга оширилади, бир киши турадиган хонадон учун йиллик 326 евро миқдоридан тўлов амалга оширилса, бир неча кишилик оила 435 еврогача маблағ сарфлаши мумкин.

Сеулда фуқаролар квартира ҳақи учун умумий тўловни тўлайди, унинг таркибига электр энергияси, сув, ҳудудни тозалаш, лифтларга хизмат кўрсатиш, чиқиндини олиб кетиш каби хизматлар киради. Чиқинди учун тўлов “қўшимча хизматлар” таркибига киритилган бўлиб, умумий тўловнинг 10 фоизидан ошмаган миқдорда ўрнатилади. Жанубий Корея чиқиндини қайта ишлаб тизимининг яна бир ўзига хос жиҳати бу озик-овқат чиқиндисини алоҳида жамланишидир. Ҳар бир чиқинди йиғиш шохобчасида озик-овқат қолдиқларини ташлаш учун алоҳида контейнер ажратилган, бироқ уни фақатгина ушбу чиқинди йиғиш шохобчасига бириктирилган турар-жой бинолари аҳолиси махсус карта орқали очиши мумкин. Қутига киритилган озик-овқат қолдиқларининг вазни автоматик равишда кутида ўлчанади ва фуқаро ҳисобига ёзиб борилади, ой якунида барча ҳисоблар жамланиб, қолдиқни утилизация қилиш ҳаражати чиқарилади ҳамда у қўшимча хизматлар таркибида квартира ҳақи учун умумий тўловга қўшилади.

Умуман ушбу давлатларда чиқиндиларни таснифлаш, тўплаш, ташиш ҳамда маҳаллий, саноат ва хавфли чиқиндиларни қайта ишлашнинг асосий жиҳатларини тартибга солувчи қонунчилик амал қилади.

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Халиков С., к.э.н.
доцент
ТошГАУ

ОЦЕНКА ЭФФЕКТИВНОСТЬ ПРОДУКЦИИ В ПИЩЕВОЙ ПРОМЫШЛЕННОСТИ

Аннотация. В статье раскрыто содержание и сущность системы показателей эффективности и показателей оценки производства продукции в пищевой промышленности. Проанализирована система показателей эффективности производства продукции путем разделения ее на показатели экономической, социальной, технологической и экологической эффективности. Также изучено использование показателей «коэффициент ресурсоэффективности» и «уровень технологической инновационности» при увеличении объемов и эффективности производства. производство продукции.

Ключевые слова: промышленность, промышленная продукция, пищевая промышленность, социальная, экономическая, технологическая, инновационная, эффективность, эффективность производства, показатели эффективности, коэффициент ресурсоэффективности, инновационный уровень технологий, валовая прибыль, рентабельность.

Khalikov S., Ph.D.
associate professor
ToshGAU

ASSESSMENT OF PRODUCT EFFECTIVENESS IN THE FOOD INDUSTRY

Abstract. The article describes the content and essence of the system of performance indicators and evaluation indicators of product production in the food industry. The system of efficiency indicators of product production was analyzed by dividing it into economic, social, technological and environmental efficiency indicators. Also, the use of "resource efficiency coefficient" and "technological innovation level" indicator was studied in increasing the volume and efficiency of product production.

Key words: industry, industrial product, food industry, social, economic, technological, innovative, efficiency, production efficiency, efficiency indicators, resource efficiency coefficient, innovation level of technology, gross profit, profitability.

Введение. В Узбекистане проводятся комплексные экономические реформы по увеличению и улучшению качества продуктов питания.

«Повышение конкурентоспособности местных продуктов питания и их диверсификация, разработка стратегии и модели развития пищевой промышленности на основе эффективного использования имеющихся природных и экономических ресурсов регионов» является одной из важных задач. Тот факт, что они установлены в качестве приоритетных, свидетельствует о важности эффективного развития предприятий пищевой промышленности.

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Анализ литературы по теме. Научные работы, направленные на оценку эффективности продукции на пищевых предприятиях, различны. По мнению экономиста Л.В. Ермолиной, производство на пищевых предприятиях характеризуется уровнем рационального использования ресурсов, предназначенных для достижения производственных целей, показывая эффективность диверсификации и экономичности. производство [2].

По мнению Н.В. Шестерикова, это долгосрочный план действий, направленный на постоянное обновление структурного и функционального содержания производственно-экономической системы (предприятия) в целях диверсификации производства продуктов питания, формирования и повышения эффективности устойчивого производства, устойчивого в условиях Изменение внешней и внутренней среды трактуется как предприятие, обладающее потенциалом, обеспечивающее общую эффективность своей деятельности, выполняющее все обязательства перед работниками, организациями, государством, получающее достаточный доход за счет диверсификации производства продуктов питания и экономической эффективности, осуществляющее соответствующую деятельность. расходы в соответствии с миссией, видением и целями компании[3].

В нашей республике такими экономистами как Х.П.Абулкосимов[4], Т.С.Расулов[5], Б.Т.Салимов[6], Г.А.Саматов[7], И.Ю.Умаров[8] проводятся научные исследования по проблемам диверсификации производства на пищевых предприятиях, совершенствованию была достигнута эффективность переработки пищевых продуктов и достигнуты замечательные научные результаты.

Не умаляя значения теоретических разработок, предложений и рекомендаций этих ученых, направленных на диверсификацию производства на пищевых предприятиях, необходимо отметить, что в условиях модернизации экономики решаются вопросы оценки эффективности производства в сети, пути. Вопросы диверсификации производства на пищевых предприятиях недостаточно изучены на основе современных подходов, что требует целенаправленных исследований в этом направлении.

Методология исследования. При подготовке статьи в целях разработки системы эффективности продукции на предприятиях пищевой промышленности были научно изучены направления разработки соответствующих научных предложений и практических рекомендаций по анализу и устранению существующих проблем, а также методы индукции, дедукции, Использовался сравнительный и систематический анализ.

Анализ и результаты. На предприятиях пищевой промышленности на повестке дня стоит вопрос создания стоимости с целью оценки эффективности продукции, что позволяет комплексно оценить эффективность и реальный вклад всех участников цепочки, не принимая во внимание предыдущую работу по созданию стоимости сетевого продукта.

Формирование добавленной стоимости в пищевой промышленности можно отразить как сумму добавленной стоимости сырьевых звеньев, добавленной стоимости производственных звеньев и добавленной стоимости распределительных звеньев. Сырьевым звеном цепочки создания стоимости являются предприятия, работающие в аграрном секторе. К предприятиям производственного звена цепочки создания стоимости можно отнести: зерно и зернопродукты, сахарные, молочные, кондитерские, мясные, рыбные, маслособойные и другие предприятия обрабатывающей промышленности. В распределительное звено цепочки создания стоимости входят предприятия, занимающиеся реализацией продукции.

Эффективность производства проявляется путем определения того, какую цену, какие затраты и какое количество ресурсов получают, а также путем определения разницы между прибылью и убытком. Эффективность производства выражается в показателях, критериях, факторах и необходимых условиях, обеспечивающих развитие предприятий пищевой промышленности. В качестве признака эффективности критерии должны отражать ее содержание и качественные аспекты. И критерий должен иметь надлежащую количественную оценку как меру эффективности.

Сущность критерия эффективности можно трактовать по-разному, и это порождает множество мнений.

При обосновании критерия эффективности большинство ученых подходило к критерию как к отличительному признаку событий и процессов, мере оценки. В то же время эти исходные условия не

используются большинством экономистов, что привело к формированию разных подходов к определению содержания критериев эффективности.

К показателям экономической эффективности предприятий можно отнести:

- валовая или чистая прибыль;
- рентабельность;
- расходы;
- производительность труда;
- возврат средств; - емкость фонда.

Сосредоточение внимания на ресурсах или затратах в производстве имеет решающее значение для достижения эффективности. В научных исследованиях для расчета эффективности с точки зрения эффективности и использования ресурсов используются следующие методы. При первом способе расчета сумма эффекта (валовая прибыль) находится путем деления ресурсов и затрат. Этот метод расчета используется при анализе показателей эффективности на предприятиях. Однако этот метод неточно указывает объем производства.

Оценка эффективности производства продукции на предприятиях пищевой промышленности проводится с точки зрения влияния на увеличение прибыли за счет улучшения качества продукции, увеличения объема выпускаемой продукции, снижения затрат труда и снижения себестоимости продукции.

При оценке экономической эффективности определяется общая (абсолютная) и сравнительная эффективность техники и технологий. Общая эффективность показывает целесообразность использования машин, оборудования и новых технологий, а сравнительная эффективность позволяет определить, какие из новых технических средств и технологий следует использовать, которые являются наиболее эффективными по сравнению с базовым вариантом.

Снижение «коэффициента ресурсоэффективности» и повышение «инновационного уровня технологии» с учетом экономических, технологических, социальных и экологических показателей эффективности производства продукции на предприятиях пищевой промышленности: эффективная организация деятельности, обеспечение производственной эффективности предприятий перерабатывающей промышленности, Производство продукции увеличивает объемы производства и переработки, позволяет своевременно доставлять продукты питания потребителю.

Выводы и предложения. Выявлены следующие специфические характеристики предприятий пищевой промышленности: сезонность или непрерывность производства; виды перерабатываемого сырья и материалов; объем выпускаемой продукции и ее ассортимент; дополнительный расход материалов; квалификация рабочих и служащих; кратковременное хранение сырья и готовой продукции; особенности сортировки, упаковки и логистики

продукции. При изучении характеристики предприятий пищевой промышленности целесообразно изучать особенности их размещения с учетом факторов, влияющих на их развитие на территории страны, а также их внутреннюю структуру.

Систему показателей эффективности производства в сети пищевой промышленности предложено сгруппировать следующим образом: показатели экономической, социальной, технологической и экологической эффективности.

При оценке экономической эффективности определяется общая (абсолютная) и сравнительная эффективность техники и технологий. Общая эффективность показала целесообразность использования новой технологии, а сравнительная эффективность позволила определить, какая из технологий должна быть использована, которая является наиболее эффективной по сравнению с базовым вариантом.

Внедрение современного оборудования и инновационных технологий в деятельность предприятий пищевой промышленности увеличивает объемы и эффективность производства продукции. Поэтому автор предложил использовать показатели «коэффициент ресурсоэффективности» и «уровень технологической инновации» при определении показателей экономической эффективности.

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Халиков С., к.э.н.
доцент
ТошГАУ
Худжамов Д.
самостоятельный исследователь
КарИЭИ

ПУТИ ДИВЕРСИФИКАЦИИ ПРОДУКЦИИ ПИЩЕВОЙ ПРОМЫШЛЕННОСТИ

Аннотация. В статье раскрыты содержание и сущность показателей системы диверсификации производства на предприятиях пищевой промышленности. Анализируются пути диверсификации производства продукции. Также раскрываются пути повышения эффективности диверсификации производства продукции за счет внедрения современного оборудования и инновационных технологий в деятельность предприятий пищевой промышленности.

Ключевые слова: промышленность, промышленная продукция, пищевая промышленность, диверсификация продукции, эффективность, эффективность производства, показатели эффективности, коэффициент ресурсоэффективности, уровень технологической инновационности, валовая прибыль, рентабельность.

Khalikov S., Ph.D.
associate professor
ToshGAU
Khudzhamov D.
independent researcher
KarIEI

WAYS TO DIVERSIFY PRODUCTS OF THE FOOD INDUSTRY

Abstract. The content and essence of indicators of production diversification system in food enterprises are described in the article. Ways to diversify product production are analyzed. Also, ways to increase the efficiency of product production diversification by introducing modern equipment and innovative technologies into the activities of food industry enterprises are revealed.

Key words: industry, industrial product, food industry, product diversification, efficiency, production efficiency, efficiency indicators, resource efficiency coefficient, level of technological innovation, gross profit, profitability.

Введение. Быстрый рост спроса на пищевую продукцию каноати, с одной стороны, является эффективным использованием имеющихся ресурсов, а с другой стороны, эффективность и конкурентоспособность производства обеспечиваются инновационными технологиями.

В Узбекистане проводятся комплексные экономические реформы по увеличению и улучшению качества продуктов питания. «Повышение конкурентоспособности местных продуктов питания и их диверсификация, разработка стратегии и модели развития пищевой промышленности на основе эффективного использования имеющихся природных и экономических ресурсов регионов» является одной из важных задач. Тот факт, что они установлены в качестве приоритетных, свидетельствует о важности эффективного развития предприятий пищевой промышленности.

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Анализ литературы по теме. Основное внимание уделяется путям диверсификации продукции пищевой промышленности. По мнению экономиста Л.В. Ермолиной, производство характеризуется уровнем рационального использования ресурсов, предназначенных для достижения производственных целей, что свидетельствует об эффективности диверсификации продукции пищевой промышленности [2].

По мнению Н.В. Шестерикова, это долгосрочный план действий, направленный на постоянное обновление структурного и функционального содержания производственно-экономической системы (предприятия) в целях диверсификации производства продуктов питания и создания устойчивого производства, имеющего стабильный потенциал. В меняющейся внешней и внутренней среде трактуется, что предприятие обеспечивает общую эффективность своей деятельности, выполняет все обязательства перед работниками, организациями и государством, получает достаточный доход за счет диверсификации производства продуктов питания, осуществляет соответствующие расходы в соответствии с требованиями. миссия, видение и цели компании [3].

В нашей республике такими экономистами как Х.П.Абулкосимов[4], Т.С.Расулов[5], Б.Т.Салимов[6], Г.А.Саматов[7], И.Ю.Умаров[8] проводятся научные исследования по проблемам диверсификации производства на пищевых предприятиях, совершенствованию была

достигнута эффективность переработки пищевых продуктов и достигнуты замечательные научные результаты.

Не умаляя значения теоретических разработок, предложений и рекомендаций этих ученых, направленных на диверсификацию производства на предприятиях пищевой промышленности, необходимо отметить, что в условиях модернизации экономики вопросы оценки эффективности производства в сети, пути диверсификации продукции пищевой промышленности недостаточно изучены на основе современных подходов, что требует целенаправленных исследований в этом направлении.

Методология исследования. При подготовке статьи в целях развития системы диверсификации продукции пищевой промышленности были научно изучены направления разработки соответствующих научных предложений и практических рекомендаций по анализу и устранению существующих проблем, а также методы индукции, дедукции, сравнительного анализа. и систематический анализ.

Анализ и результаты. Исследования показывают, что существующие подходы к классификации диверсификации продукции пищевой промышленности не соответствуют общепринятым принципам. Исходя из этого, целесообразно систематически изучать существующие проблемы в этой области, в частности, показатели эффективности деятельности промышленных предприятий, направленные на диверсификацию пищевых производств, закономерности их изменения, процессы и технологии на базе отрасли. Считается целесообразным сформировать процесс диверсификации продукции пищевой промышленности в последовательности следующих критериев и раскрыть сущность и характеристики каждого критерия (табл. 1).

Таблица 1

Критерии, сущность и особенности процесса диверсификации продукции пищевой промышленности²⁴⁶.

Критерий	Характер и определение процесса	Особенности
Особенности технологической цепочки	От сельского хозяйства до потребления человеком продуктов питания все происходящее	Затрагивает зону обслуживания
Определение роли бизнеса	Превратить продукты питания в полезные, востребованные на рынке продукты	Эффективные методы конфликта между потребителем и бизнесом
По конечному продукту	Проведение определенных операций для получения целевого конечного пищевого продукта	Выделены отдельные операции в цепочке

²⁴⁶ Разработано автором.

Операционная	Действия и изменения операций вплоть до потребления эксплуатационных энергоресурсов	Подробности включают сельское хозяйство и услуги.
По способу обработки	Физический (резка, смешивание), низкий учитываются продукты с разным температурным, химическим (бродильным и т.п.) составом	Учитывается различный виды продукты
Пищевые продукты в соответствии с их конечным назначением	Изменить характеристики ряда пищевых продуктов для достижения следующих целевых показателей процесс улучшения функций: безопасность (профилактика отравлений), качество (удовлетворение требований потребителей), стоимость (дополнительные льготы), удобства (хранения, приготовления, упаковки и т.п.), реализуемого на продовольственном рынке исъедобный	Предназначен для конечного продукта его классифицируют в соответствии с его назначением.

На наш взгляд, при диверсификации производства на предприятиях пищевой промышленности в целях удовлетворения потребностей потребителей необходимо ориентироваться на принятие за основу подхода, направленного на совершенствование технологических операций и процессов, обеспечивающих важные характеристики продукции - качество, ценность и удобство.

В настоящее время доля природных ресурсов в стоимости конечной пищевой продукции снижается. Влияние земли, основного фактора производства, на производство снижается, сельское хозяйство становится все более индустриализированным по своему составу и используемым технологиям. Взаимное сотрудничество предприятий пищевой промышленности и поставщиков сырья представляет собой систему взаимозависимых экономических отношений внутри пищевой цепи, которая в конечном итоге представлена совокупностью звеньев, создающих ее стоимость на различных промежуточных этапах движения продукции.

Диверсификация продукции пищевой промышленности предназначена в первую очередь для потребительских нужд, а большая ее часть затем направляется на промышленную переработку, например, на сами предприятия пищевой промышленности (сахар для производства кондитерских изделий, растительное масло для производства маргарина) или другие отраслей предприятиям (спирт для технических целей, соль для химической промышленности, крахмал для легкой промышленности).

При диверсификации производства на пищевых предприятиях сезонность производства, неравномерное использование основных фондов в течение года, недостаток оборотных средств приводят к остановке деятельности некоторых подотраслей пищевой промышленности. Поэтому вопросы организации использования оборотных средств в таких субъектах малого предпринимательства являются актуальными. Часть продукции предприятий пищевой промышленности предназначена для внутреннего потребления. Поэтому данным малым предприятиям целесообразно принять меры по увеличению видов выпускаемой продукции в целях обеспечения продовольствием населения. В то же время эти малые предприятия также должны учитывать потребности и финансовое положение потребителей. Это означает, что для эффективной работы предприятий необходимы более благоприятные условия и социально-экономическая среда.

Выводы и предложения. По результатам проведенных исследований состав диверсификации продукции пищевой промышленности можно классифицировать следующим образом:

К первой группе пищевых предприятий можно отнести: зернопродукты (крупы, мука, макаронные и хлебобулочные изделия), для этой группы предприятий характерен недостаток сырья и неудовлетворительное качество переработки.

Ко второй группе пищевых предприятий относятся: предприятия плодоовощной продукции (фрукты, овощи, ягоды, грибы и др.).

К предприятиям третьей группы можно отнести: хозяйствующие субъекты, производящие вкусоароматические продукты (специи, чай, кофе).

В четвертую группу входят предприятия, производящие молоко и молочную продукцию (молоко, сливки, сыры).

К предприятиям пятой группы могут быть отнесены: хозяйствующие субъекты, производящие мясную, рыбную и птицеводческую продукцию (мясо, яйца, рыба, колбасные изделия, консервы).

В шестую группу пищевых предприятий входят производители напитков (водка, пиво, вино, соки, минеральная вода).

К седьмой группе предприятий пищевой промышленности можно отнести хозяйствующие субъекты, выращивающие табачную продукцию.

Ограниченное производство сельскохозяйственного сырья в регионах по сравнению с текущим спросом, а также зачастую его низкая ценовая конкурентоспособность определяют необходимость для пищевой промышленности поставок дополнительного сырья от других предприятий и из-за границы. Кроме того, необходимо рассмотреть возможность использования биологических ресурсов в качестве сырья для пищевой промышленности.

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*Хамдамов К.Қ.
Андижон қишлоқ хўжалиги
ва агротехнологиялар институти*

ИНТЕНСИВ БОҒДОРЧИ ЛИҚДА ЁЗГИ КЕСИШНИ ОЛМА ҲОСИЛДОРЛИГИ ТАЪСИРИАН

Анотация Маълумки, мевачилик Ўзбекистон республикаси қишлоқ хўжалигининг муҳим тармоқларидан бири ҳисобланади. Республикада 2021 йилда ички истеъмол бозорини асосий турдаги озиқ-овқат маҳсулотлари билан тўлдириш ва нархлар барқарорлигини таъминлаш мақсадида 1888,1 млн тонна мева талаб қилинади, ишлаб чиқариш 3380,2 млн тонна, 401,91 млн тонна узум талаб қилиниб, 1884,2 млн тонна ишлаб чиқариш прогноз қилинянди.

Калит сўзлар; мева тонна олма нав хосилдорлик дарахт.

*Khamdamov K.Q.
Andijan Institute of Agriculture and Agrotechnologies*

THE INFLUENCE OF SUMMER CUTTING ON APPLE YIELD IN INTENSIVE GARDENING

Abstract It is known that gardening is one of the most important branches of agriculture of the Republic of Uzbekistan. In 2021, to fill the domestic consumer market with basic food products and ensure price stability in the republic, 1888.1 million tons of fruits are needed, production - 3380.2 million tons, grapes - 401.91 million tons, 1884.2 million tons - 1884.2 million tons. production is forecast.

Keywords; apple tree with tons of fruit.

Кириш Мутахассисларнинг таъкидлашича, юртимизда олма, ўрик, шафтоли, олхўри, бодом, ёнғоқ каби меваларнинг юздан ортиқ тури учрайди. Мевачиликнинг халқ хўжалигидаги аҳамияти бениҳоя катта. Мева ва резавор- мевалар таркибида одам организми учун зарур бўлган шакар, органик кислоталар, оксиллар, ёғлар, ошловчи, пектин, ароматик моддалар, коллоидлар, минерал тузлар, ферментлар, витаминлар манбаи. Меваларнинг хуштаъмлиги овқатнинг яхши ҳазм бўлишига ёрдам беради. Кўп мевалар шифобахш хусусиятга эга бўлиб, организмнинг химоя кучини сақлайди ва мустаҳкамлайди. Мева ва резавор-мевалардан консерва, мураббо, пастила, повидло, шарбатлар ҳамда винолар тайёрланади. Уларнинг кўпчилиги қуритилиб, ажойиб қуриқ мева маҳсулотлари (туршак, қоқи, қайса, курага ва бошқалар) тайёрланади. Бу хилдаги қуритилган меваларни узок сақлаш, мазаси ва тўйимлилик сифатига унчалик зарар етказилмаган ҳолда узок жойларга олиб бориш мумкин. Ҳозирги вақтда мамлакатимизда аҳоли жон

бошига кунига камида 330-400 г ёки йилига 115-120 кг мева, шундан 15 кг узум ва 10 кг резавор-мева етиштирилиши керак. Ўзбекистон ўлка тиббиёт институти республика аҳолисининг узум истеъмол қилиш нормасини 25 кг га оширишни ва бунга қўшимча яна 10-11 кг қуритилган мевалар истеъмол қилишни тавсия қилади. Лекин, бугунги кунда аҳоли жон бошига йил давомида 94 килограмм мева, шундан 12 килограмм узум ишлаб чиқарилмоқда. Бу кўрсаткич АҚШ, Италия, Испания, Франция каби мамлакатларда 120-230 килограммни ташкил этмоқда. Мева дарахтлари ҳақидаги дастлабки маълумотлар эрамизгача бўлган В асрда учрайди. Мевачилик ва унинг маҳсулотлари янги эранинг Х асридан бошлаб товар хусусиятига эга бўлган. Чунки, ана шу вақтдан бошлаб қўшни мамлакатлар билан мева ва мева маҳсулотлари савдоси ўрнатилган Олма жанубий туманларида мева дарахтларининг энг қимматли турларидан бири ҳисобланади. Ўтқазилганидан кейин учинчи, баъзан иккинчи йили ҳосилга киради. Меваси янгилигича ва қайта ишланган ҳолда истеъмол қилинади. Меваси чиройли рангли сершира, майин, хушбўй, қанд ва кислота уйғунлашган ёқимли маза беради. Ундан компот, жем, цукатлар мураббо, мармелад ва бошқа маҳсулотлар тайёрланади, қуритиб қоқи ҳам қилинади. Музлатиб қўйилган олманинг маззаси яхши сақланади. Олманинг сифати, хўжаликда ишлатилиши ва пишиши муддатлари турлича бўлган 5000 га яқин нави маълум. Олманинг ватани Россия ҳисобланади. Бу ердаги тоғларда ёввойи ҳолда ўсаётганлари топилди.

Экиш схемаси – Пальмет шаклда дарахтлар сони гектарига 2,5-3,0х 2,5-3,5м схемада 950-1600 та. Дарахтлар экиш схемаси 3,5 х 1,25м Дарахтлар сони гектарига 2057 та Шохларни ёзги буташ талаб этади

Суғориш – олмани тупроқ иқлим шароитидан келиб чиқиб, 6 мартадан 10 мартагача суғорилади. Унимдор тупроқларда 6-8 марта, 800-100м³ сув сарф этилади. Шағалли тупроқларда 8-10 марта 600 м³ сув сарф этилади.

Ўғитлаш – тупроқ унимдорлигига қараб минерал ўғитлар 100-120 кг азот, 100-120 кг фосфор, 60-70 кг калий ўғитлари соф ҳолда солинади.

Янги боғлар барпо этишда, улар атрофига шамол тўсувчи ихота дарахтзорлар барпо этиш катта аҳамият касб этади. Афсуски, кўпгина хўжаликларда бу тадбир эсдан чиқиб, натижада ёш мевазорлар кучли шамол ва қишки совуқлардан зарар кўради. Шу билан бирга мевалар шикастланиб, ерга тўкилади. Ихота дарахтзорлари боғ чегарасида, шамол кўпроқ эсадиган томонда мева дарахтларидан 15-20 м масофада олти-саккиз қаторли полосалар шаклида барпо этилади. Бунинг учун терак, ёнгоқ, заранг, тол, ўрик ўтқазилади. Қаторлардаги дарахтлар ўртасида 1-2 м дан колдирилиб, кейинчалик қатор оралари 2,5,3 м гача сийраклаштирилади. Боғ ичида кварталлараро йўллар бўйлаб, баланд дарахтлардан бир-икки қаторлаб шамол тўсувчи дарахтлар (терак ва хоказо) ўтқазилади.

Ўсув давр ва суғориш туфайли мева дарахтлари бақувват ўсиб, юкори ҳосил беради. Бунда мева дарахти кучли илдиз системаси кўп микдорда озиқа моддалари ва сув сарфлайди.

Шу нарса аниқланганки, тупроқнинг илдиз ўсадиган катламларида 18-20% намлик мавжудлигида мева дарахтлар

Пакана пайвантагларда етиштирилаётган олма навлари

№	Нав	Пишиш муддати	Мева вазни, гр	Мева териш муддати	Пайвандтаг	Ўстириш усули
1	Первенец Самарканда	Ёзги	100-130	25-30 июнь	Пакана бўйли	Эркин
2	Старк Эрлист	Ёзги	80-100	1-5 июль	Пакана ва ярим пакана	Симбагазда
3	Кинг Девид	Кузги	100-120	1-10 август	Пакана ва ярим пакана	Эркин, симбагазда
4	Пармен зимний золотой	Кузги	100-120	5-15 август	Пакана бўйли	Симбагазда
5	Джона ред	Кузги	140-160	20-25 август	Пакана ва ярим пакана	Эркин, симбагазда
6	Роял ред делишес	Кузги	150-180	25-30 август	Пакана ва ярим пакана	Эркин, симбагазда
7	Голден делишес	Кузги	130-150	01-10 сентябрь	Пакана	Эркин, симбагазда
8	Ренет Семиренко	Қишки	120-140	20-30 сентябрь	Пакана ва ўрта бўйли	Эркин, симбагазда
9	Нафис	Қишки	160-180	5-10 октябрь	Пакана бўйли	Симбагазда

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*Хамитов Р.А.
кафедра русского языка и методики его преподавания
Джизакский государственный
педагогический университет имени А.Кадыри*

**ОТ ИНОЯЗЫЧНОГО ВЛИЯНИЯ К КУЛЬТУРНОМУ
ОБОГАЩЕНИЮ: «АНГЛИЙСКИЕ ЗАИМСТВОВАНИЯ В
РУССКОМ ЯЗЫКЕ»**

Аннотация. В данной работе анализируется процесс ассимиляции новых английских лексем в русский язык. Предлагается систематизированная классификация наиболее распространённых аффиксов, применяемых для адаптации заимствованных неологизмов к правилам принимающего языка.

Ключевые слова: неологизм, аффиксация, заимствование, английский язык, русский язык.

*Khamitov R.A.
Department of Russian language and methods of teaching it
Jizzakh State Pedagogical University named after A. Kadyri*

**FROM FOREIGN LANGUAGE INFLUENCE TO CULTURAL
ENRICHMENT: “ENGLISH BORROWINGS IN THE RUSSIAN
LANGUAGE”**

Abstract. This article analyzes the process of assimilation of new English lexemes into the Russian language. A systematic classification of the most common affixes used to adapt borrowed neologisms to the rules of the host language is proposed.

Keywords: neologism, affixation, borrowing, English, Russian.

Язык — это средство общения людей. Он занимает важнейшее место в нашей жизни. Язык подобно живому организму меняется, адаптируется во времени. Как и в организме живых существ на замену старым вымершим клеткам приходят новые, так и в языке вместо старых, ушедших из употребления слов возникают новые. Основным источником пополнения языка являются его собственные ресурсы, но часто новые лексические единицы появляются в языке за счёт заимствования. Сегодня, в 21 веке, огромное количество слов русским языком позаимствовано из английского. Такие слова называются англицизмами. В словаре С.И. Ожегова даётся такое определение данному понятию: «Англицизм – это слово или оборот речи в каком-нибудь языке, заимствованные из английского языка или созданные по образцу английского слова или выражения» [4, 47]. Явление

интеграции новых английских лексических элементов и фраз в русский язык привлекает особое внимание лингвистов ввиду его широкого распространения и значимости. Возникая в новой языковой среде, англицизмы ведут себя по-разному. Какие-то из них могут адаптироваться к грамматическим и словообразовательным правилам, какие-то – нет.

Неологизмы являются отражением того, как язык меняется и развивается со временем. Возникновение новообразований в лингвистической среде обычно объясняется комплексом различных факторов. Вот некоторые из них:

Социокультурные изменения: Эволюция общества, его ценностей, технологий и т. д. может породить новые понятия, идеи и концепции, для которых требуются новые слова или выражения.

Контакт между языками: В мире, где различные языки и культуры сталкиваются и взаимодействуют, происходит обмен словами, выражениями и грамматическими конструкциями. Это может приводить к заимствованию и адаптации слов из других языков.

Технологические инновации: Внедрение новых технологий создаёт необходимость в новой лексике для описания этих технологий и связанных с ними концепций. Например, появление интернета и медиа способствовало появлению множества новых терминов и аббревиатур.

Глобализация: Процессы глобализации способствуют распространению культурных и языковых элементов по всему миру, что может привести к появлению новых слов и выражений в различных языках.

Социальные изменения и тренды: Изменения в образе жизни, включая новые тренды, могут также стимулировать появление новой лексики. Например, появление новых видов развлечений, спорта или образа жизни может внести вклад в лингвистическое разнообразие.

Семантические потребности: Иногда существующей лексике не хватает слов или выражений для описания новых явлений или концепций, и поэтому создаются новые термины.

Сегодня выделяют следующие способы заимствования англицизмов:

Прямые заимствования. Вот некоторые из них: «уикенд», «тинейджер», «бойфренд». Подобные слова в русском языке имеют то же значение и вид, что и в английском.

Экзотизмы: «чизбургер», «памперс», «айфон». Такие заимствования нужны для наименования предметов, которые характерны для жизни и быта другой национальности.

Гибриды: «креативный», «флешка», «аппаратчик». Подобные лексические единицы состоят из морфем разного происхождения: исконного и заимствованного.

Профессионализмы: «копирайтинг», «коворкинг». Они приходят в язык из-за того, что растёт популярность определённой профессии.

Англицизмов в русском языке достаточно большое количество. И, конечно же, знать их все невозможно. Но, если человек изучал когда-либо английский язык и знаком с ним на определённом уровне, для него не составит труда распознать подобные слова в русском языке. А для тех, кто не знаком с английским языком, ниже будет несколько признаков таких слов:

1. «мен». В подобных словах, как «шоумен», «полисмен», «спортсмен», «супермен» общей является часть «мен».

2. «ер» либо «ор». В словах «тьютор», «инвестор», «провайдер», «оффшор», «докер» элементом, объединяющим их, является «ер» либо «ор»

3. «мент». Можно привести в пример такие слова, как «менеджмент», «импичмент», «истеблишмент»

4. «дж» и «тч». Эти элементы можно встретить в таких словах, как «имидж», «гаджет», «джерпер» и т.д.

5. «ай» и «ей»: «спрей», «дисплей», «онлайн», «имейл»

Важно отметить, что новые лексические единицы могут внедряться в язык при помощи различных морфем.

Например, приставка «де», которая используется в словах, обозначающих отрицание либо отмену чего-нибудь: деблокировать, демультипликатор, депромоушн, при помощи приставок «топ-», «экс-», «мега-», «нон-», «анти-», «супер-», «псевдо-» были образованы такие слова, как антидемпинговый, демотиватор, нонфакт, псевдосфера и многие другие. Помимо этого, англицизмов, образованных при помощи суффиксов, также немало. Например, слова киднепинг, паркинг, тренинг, ребрендинг, трейдинг. Они образованы при помощи суффикса «-инг». Следует отметить, что в русский язык из английского проникают и такие неологизмы, которые образованы путём аббревиации. Частотность использования данной словообразовательной модели обусловлена потребностью говорящих в обобщённом восприятии содержательной стороны новых языковых единиц. Например, PR (public relations), IP (internet protocol), ЛОЛ – LOL (громко смеяться – laugh out loud) и т.д. [8, 814]

Отдельно предлагаем рассмотреть англицизмы, употребляемые в различных сферах жизни. Например, в сфере политики часто используются такие слова как министр, вице-мэр, консенсус, администрация. В экономической сфере употребляются термины вроде монетаризм, дилер, бартер, инвестиция и т.д. В быту часто используются англицизмы паб, хот-дог, шопинг, гамбургер, босс и др. В спортивной же сфере употребляются такие слова, как тренинг, армрестлинг, скейтборд, овертайм, бодибилдинг. В культурной сфере используются слова вроде саунд, шоу, бестселлер, вестерн, видео и многие другие. Также новые лексические элементы могут возникать в языке через применение комбинированных моделей словообразования, таких как словосложение или смешанное словообразование.

- неологизмы, образованные путём сложения начальной части слова (основы) с целым словом, т.е. образование сложносокращённых слов: инфопауза, автоджакузи, автохлам, автосауна.

- неологизмы, образованные посредством сложения производящих основ: промоакция, фейс-контроль, маркет-мейкер, флэшмоб, пати-мейкер, мастхэв;

Из-за того, что в русском языке появилось большое количество иностранных слов, усилилась борьба с подобными заимствованными словами. В высказывании академика Чельшева Е.П. подчёркивается, что экономически обоснованные и естественные заимствования, постепенно ассимилируемые языком без разрушения его национальной основы, являются необходимыми. Одновременно он высказывает недовольство по отношению к агрессивной и тотальной «американизации» языка. Например, пришедшее из американского английского языка слово «киллер» (в русском языке оно обозначает профессионального убийцу). [2, 40]

Интересным является феномен переосмысления новых лексических единиц, заимствованных из английского языка, в контексте их использования носителями русского языка. Этот процесс обусловлен социокультурными факторами и приводит к сужению семантического поля заимствованных слов. Примерами таких лексем могут служить: "опция", "месседж", "тендер", "сингл", "драйв". Активное внедрение подобных слов в русскоязычную среду сопровождается их адаптацией к менталитету и потребностям принимающей культуры, что проявляется в изменении их значения и употребления.

Обратим внимание, что заимствованные неологизмы постепенно ассимилируются в русском языке и иногда настолько часто используются в повседневной речи носителями, что со временем уже не воспринимаются как инородные элементы. Особенно это актуально для молодёжной среды, которая находится в постоянном развитии и стремится всегда следовать моде. [5]

Иностранные лексические единицы, связанные с основными аспектами человеческой деятельности, широко интегрируются в русский язык и легко распознаются по их характерным особенностям. Новые слова чаще всего появляются в печатных изданиях и других средствах массовой информации. Благодаря интернету молодёжь активно применяет англицизмы и их сокращения. В целом заимствования иностранных слов – это один из способов развития современного языка.

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*Хасанов Ш.Х.
декан
Университет информационных
технологий и менеджмента
Узбекистан, г.Карши*

РАЗВИТИЕ ФОРМ СОБСТВЕННОСТИ В АГРАРНОМ СЕКТОРЕ

Аннотация. В данной статье проанализированы факторы, влияющие на формирование и развитие собственности агропредпринимательской деятельности, разработаны научно обоснованные предложения рекомендации по повышению роли в конкурентной среде.

Ключевые слова: предпринимательство, творчество, бизнес, частно-индивидуальное предпринимательство, частно-корпоративное предпринимательство, партнерство, агропромышленный комплекс, малый бизнес, кластер, кооперация, домохозяйства.

*Khasanov Sh.Kh.
dean
University of Information Technology and Management
Uzbekistan, Karshi*

DEVELOPMENT OF OWNERSHIP IN THE AGRICULTURAL SECTOR

Annotation. This article analyzes the factors influencing the formation and development of ownership of agro-entrepreneurial activities, developed scientifically based proposals for recommendations on increasing the role in the competitive environment.

Key words: entrepreneurship, creativity, business, private-individual entrepreneurship, private-corporate entrepreneurship, partnership, agro-industrial complex, small business, cluster, cooperation, households.

Одна из основных задач экономических реформ в странах-повышение благосостояния населения, а материальной основой экономического роста является производство, обеспечивающее эффективную организацию малого бизнеса и частного предпринимательства. Для этого необходимо улучшить организационные, экономические и частные отношения, а также правильно решить существующие проблемы. Это требует глубокого понимания социально-экономической сущности предпринимательства.

Предпринимательство – это деятельность, при которой в связи с производством товаров и услуг осуществляется фактическое использование

собственных или других материальных и денежных ресурсов, то есть капитала. Поэтому, предпринимательство связано с функцией капитала.

Малый бизнес и частное предпринимательство - важная составная часть рыночной экономики. Это массовая основа и элемент механизма рыночной конкуренции. Развитие рыночной экономики без предпринимательства, в том числе малого бизнеса, невозможно даже действовать.

Предпринимательство проявляется в государственной, негосударственной, в том числе частной, смешанной формах собственности. Негосударственные формы включают частно-индивидуальное и частно-корпоративное предпринимательство. В свою очередь, субъект частного предпринимательства будет основан на собственном и наемном труде. Частно-корпоративное предпринимательство проявляется как партнерство, смешанное, арендуемые предприятия. Индивидуальное предпринимательство включает себя частное предпринимательство, семейные предприятия, осуществляющие индивидуальную трудовую деятельность, основанную на собственном труде, частный и наемный труд. Коллективная форма предпринимательства включает государственный, сельскохозяйственные кооперативные предприятия, партнерство и самоуправляющиеся фирмы, акционерное общество, предприятия трудового коллектива, и т.д. В зависимости от уровня организации различают индивидуальные и коллективные формы предпринимательства.

Индивидуальное предпринимательство включает частное предпринимательство, семейные предприятия, осуществляющие индивидуальную трудовую деятельность, основанную на собственном труде, частный и наемный труд. К коллективной форме предпринимательства относятся государственные, ширкатные хозяйства, корпорации, партнерство и самоуправляющиеся фирмы, предприятия трудового коллектива, акционерные общества и др. Согласно сфере деятельности, предпринимательство имеет формы производства, оказания услуг, коммерческой деятельности и коммерческого посредничества. Форма предпринимательства в виде малого, среднего и крупного бизнеса в зависимости от количества сотрудников, занятых на предприятии.

Таким образом, формы предпринимательства взаимосвязаны, и любая из них может иметь несколько форм одновременно. Например, форма частного предпринимательства проявляется в разных формах в зависимости от уровня организации, сферы деятельности и количества занятых.

В зависимости от уровня организации бизнеса его проявление в той или иной форме зависит от ряда факторов. Организационная, организационная форма предпринимательской деятельности, прежде всего личная заинтересованность предпринимателя, желание заявить о себе; во-

вторых, сфера деятельности; в-третьих, количество наличных денег; в-четвертых, это зависит от склонности к риску [1].

Одна из современных форм предпринимательства - это корпоративная форма. Он действует в основном в форме акционерного общества. Доля каждого из его участников определяется количеством принадлежащих ему акций [2]. Самым важным преимуществом этой формы бизнеса является очень ограниченная ответственность акционеров, разделение функции капитала, то есть отделение капитала от собственности, возможность привлечения дополнительных средств путем выпуска акций. Такие общества в основном преобладают в сферах экономической деятельности, требующих большего финансовых и материальных ресурсов, технологически крупных масштабов и сложной материально-технической базы.

Исходя из вышеизложенного, можно сказать, что проводимая государством экономическая политика, направленная на построение демократического общества, полноценно функционирующей рыночной экономики, основанной на приоритете частной собственности, в сегодняшнюю стратегию экономического развития должна включать развитие малого бизнеса и частного предпринимательства [3].

В результате экономических реформ в агропромышленном комплексе сформированы хозяйствующие субъекты на основе различных форм собственности и некоторые объекты собственности были приватизированы и преобразованы в частно-индивидуальную, частно-корпоративную формы предпринимательства. В сфере сельскохозяйственного производства агропромышленного комплекса созданы, прежде всего, корпоративные хозяйства, в том числе фермерские, дехканские хозяйства [4].

Культурные, бытовые и торговые объекты в сфере услуг были приватизированы и эксплуатировались как частные предприятия, объекты производственной инфраструктуры были преобразованы в акционерные общества МТЗ, ММТП, поставка удобрений, поставка семян, поставка ГСМ.

Предприятия по переработке сельскохозяйственной продукции были преобразованы в акционерные общества в связи с их большими производственными мощностями и технологиями. В этой сфере сформированы только малые предприятия по переработке овощей и фруктов.

Взаимозависимость деятельности хозяйствующих субъектов на основе разной формы собственности в сфере агропромышленного комплекса создает аграрные отношения. Деятельность всех хозяйствующих субъектов в аграрном секторе приводит к формированию агробизнеса, поскольку агробизнес отличается от предпринимательского движения в других секторах. Потому что на основе этой отрасли является производство сельскохозяйственной продукции в связи с земельными отношениями. Это означает, что в агропромышленном комплексе есть особенности организации частного предпринимательства.

Эффективная организация текущей и будущей деятельности малых предприятий и частных предпринимателей, работающих в агропромышленном секторе сегодня. соотношение должно быть обеспечено.

Эффективность текущей и будущей деятельности малых предприятий и частных предпринимателей, действующие в агропромышленном секторе зависит от соотношения прибыли и затрат.

На наш взгляд, в связи с взаимозависимостью агропромышленного комплекса целесообразно наладить кооперацию, объединяющую отрасли, и это сотрудничество базируется на материальной базе крупных фермерских хозяйств и малых перерабатывающих предприятий в сторону предприятий инфраструктуры. Это сотрудничество организовано на основе финансовых слияний предприятий агропромышленного комплекса и является основой для развития сельхозпроизводителей и перерабатывающих предприятий.

Члены кооператива - малые предприятия агропромышленного комплекса, объединенные по функциональным направлениям производства. Осуществляется исполнительным органом на основании решения созданного совета кооператива. Например, в сельском хозяйстве используется около 2500 сельскохозяйственных машин, и не все из них можно приобрести одному малому предприятию. ММТП не имеют возможности приобрести сельхозтехнику.

У государства также нет возможности поставить сложную сельскохозяйственную технику в каждый регион. Потому что развитие сельского хозяйства само по себе не обеспечивает стабильности в стране. Другие отрасли также нуждаются в развитии. Его может поощрять государство только через организационные, правовые, экономические и финансовые стимулы.

В такой ситуации можно объединить возможности малых предприятий и стать самодостаточными на кооперативной основе. Члены совместного кооператива в области техники и технологий добровольно объединят свои финансовые ресурсы для закупки сельхозтехники, приобретения перерабатывающей техники, закупки необходимого оборудования для предприятий инфраструктуры.

Использование техники и технологий, полученных за счет накопленных финансовых средств, полностью используется собственниками имущества по решению совета кооператива, членам кооператива предоставляются льготы в их услугах. С малых предприятий, не являющихся членами кооператива, взимается полная плата за обслуживание. Прибыль от этого вычитается из затрат на организацию и деятельность кооператива и распределяется между собственниками в соответствии с их вкладом. Этот порядок взаимодействия целесообразно применить и в других функциональных сочетаниях.

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Хасанов Ж.Ю., PhD
заведующий отделом контроля качества образования
Самаркандский государственный
университет имени Шарофа Рвашидова
Ургутский филиал

СТРАТЕГИЧЕСКИЕ НАПРАВЛЕНИЯ РАЗВИТИЯ ЭКОТУРИЗМА (НА ПРИМЕРЕ БАССЕЙНА СРЕДНЕГО ЗАРАФШАНА)

Аннотация. В статье исследуются стратегические направления по развитию экологического туризма, экотуристических маршрутов и экотуристических мест на примере южных горных ландшафтов бассейна Среднего Зарафшана.

Ключевые слова: мировой опыт экотуризма, горный туризм, спелеотуризм, санаторно-курортный отдых, современная концепция экотуризма, экотуристические маршруты, туристические направления, экотуристические зоны и мониторинг экотуризма.

Khasanov Zh.Yu., PhD
Head of Education Quality Control Department
Samarkand State University named after Sharof Rvashidov
Urgut branch

STRATEGIC DIRECTIONS FOR ECOTOURISM DEVELOPMENT (BASED ON THE EXAMPLE OF THE MIDDLE ZARAFSHAN BASIN)

Annotation. The article explores strategic directions for the development of ecological tourism, tourist routes and ecotouristic places on the example of the southern mountain landscapes of the Middle Zarafshan basin.

Keywords: world experience of ecotourism, mountain tourism, speleotourism, sanatorium and resort recreation, modern concept of ecotourism, ecotourism routes, tourist destinations, ecotourism zones and ecotourism monitoring.

Актуальность. В нашей республике, в том числе в Среднем Зарафшане, туризм следует рассматривать как отдельную отрасль, приносящую доход, и государство должно уделять ему большое внимание. Потому что в каждом регионе есть свои туристические ресурсы, использование которых принесет доход, а неиспользование не принесет никакой пользы. В этом отношении проводится множество исследований, и определенный доход достигается за счёт использования даров природы в качестве туристического ресурса.

В настоящее время ряд ученых в нашей республике и за рубежом занимаются исследованиями проблем развития экологического туризма, в частности, в таких исследованиях изучаются стратегические направления развития экотуризма, не оформленные должным образом. Кроме того, стратегические направления развития экологического туризма имеют свои особенности. Это требует большей точности для бассейна Среднего Зарафшана. Потому что бассейн Среднего Зарафшана отличается от других регионов своими зонами экотуризма. Экологическая ситуация бассейна характеризуется главным образом обилием природных и живописных территорий, а наряду с вышеперечисленными условиями происходили и экологические процессы, связанные с опустыниванием. В таких условиях развитие экологического туризма будет иметь свои стратегические направления.

Основная часть. Бассейн Среднего Зарафшана. Важность развития туризма в целом и экотуризма, являющегося его последующей частью, характеризуется тем, что, несмотря на наличие огромного потенциала экотуризма в бассейне, его развитие остается очень медленным. Кроме того, количество субъектов, занимающихся туризмом в республике очень невелико.

И. Вэнь на примере Китайской Народной Республики предлагает трёхступенчатую систему экотуризма при формировании эффективной туристской инфраструктуры в строгой последовательности, где развитие туризма, в том числе экотуризма, рассчитано прежде всего на долгосрочную перспективу. [1]:

- создание туристских центров в пределах каждой административной единицы;
- создание вторичных небольших поселений, приспособленных для экотуризма;
- предложил проводить эксперименты и тестовые работы в горных и пустынных районах с хрупкими экосистемами в этих небольших населенных пунктах.

Лю Цзямин пока для научного и планового развития экотуризма на национальном уровне предлагается финансировать научные исследования и получать от них конкретные предложения, проводить их апробацию на примере конкретных регионов, разрабатывать краткосрочные и долгосрочные меры.[2].

Если Фу Боце говорит, что создание перспектив развития экотуризма должно начинаться с создания концепции зонирования на национальном уровне, то другие авторы подчеркивают, что эта концепция может быть создана не только на национальном уровне, но и на уровне местных экосистем[3].

Украинские специалисты продвигают вопрос экологизации санаториев и рекреационных объектов, расположенных в горных районах.

Прежде чем пригласить посетителей на экотуризм, автор предложил предоставить им соответствующую информацию по вопросам охраны окружающей среды. В целях сохранения живых объектов природы британские учёные в своих научных работах подчёркивают важность формирования любви к матери-природе путём организации в оздоровительных и летних детских центрах отдыха живых уголков, связанных с природой и её живыми организмами.[4].

А.Б.Дроздов в создании концепции современного экотуризма и её реализации: предложил разработку задач в системе наука – образование – практика в глобальном, региональном и локальном масштабе. Представлены понятия, принципы, признаки и формы создания концепций экотуризма и анализа мероприятий с туристической точки зрения. Коллеги А. В. Дроздова рекомендовали создавать программы и планы, связанные с экотуризмом, на основе российского и международного опыта [5].

А.Н.Нигматов остановился на национальном уровне и им были затронуты основные направления развития экотуризма [6]:

- *разработка специальных законов по формированию индустрии экотуризма и создание их правового механизма;*
- *развитие теоретических основ экотуристской науки, образования и практики;*
- *повышение экологического сознания и культуры населения посредством экотуризма;*
- *создание системы образования и обучения в области экотуризма;*
- *решение вопросов социальной защиты местного населения посредством экотуризма;*
- *подготовка и переподготовка специалистов экотуризма;*
- комплексная оценка объектов экотуризма и ведение их кадастра;*
- *наладить мониторинг и разведку экотуризма;*
- *зонирование территории нашей республики для экотуризма;*
- *установление деятельности специальных видов субъектов, занимающихся экотуризмом и имеющих статус юридического лица, и определение мер по их правовому обеспечению;*
- *разработка тактических планов и стратегических планов экотуризма государств и международного сообщества и придание им правового статуса;*
- *создание факторов, стимулирующих позитивные действия, связанные с экотуризмом;*
- *ужесточение санкций экономической ответственности против экологических правонарушителей;*
- *сохранение биологического разнообразия назначением и т. д.*

На наш взгляд, следует разработать конкретные стратегические направления развития экологического туризма в бассейне Среднего Зарафшана. Такими направлениями, на наш взгляд, являются [7]:

- постоянное увеличение экспорта и импорта услуг экотуризма;
- совершенствование организационных структур в экотуризме;
- правильное проведение социальной политики в экотуризме;
- надлежащая реализация технической и технологической политики в экотуризме;
- придаем большое значение инновациям как важному фактору развития экотуризма;
- постоянное улучшение качества туристических услуг в сфере экотуризма;
- повысить конкурентоспособность туристических компаний;
- достижение ресурсоэффективности в экотуризме.

Реализация этих концептуальных направлений служит основой для развития экотуризма в бассейне. Руководителям данной сферы целесообразно учитывать эти направления при разработке региональных программ развития экотуризма. Потому что любая программа должна быть в определенном смысле систематизирована. Исходя из этого, мы считали, что необходимо остановиться на аспектах, требующих внимания по каждому из них. По нашему мнению, в состав этих мероприятий можно включить следующее (см. табл. 1).

Таблица 1

Стратегические направления развития экотуризма в бассейне

Т/р	Стратегические направления	Содержание направлений
1.	Постоянное улучшение качества туристических услуг в сфере экотуризма.	формирование доверия у потребителей экотуристской продукции заказчиков; формирование способности постоянно совершенствовать продукцию; добиться систематического улучшения работы и повышения производительности труда; сделать создание новых рабочих мест в сфере экотуризма постоянным лозунгом; повышение квалификации кадров отрасли и при необходимости налаживание переподготовки; постоянное изучение мирового опыта; установление строгой дисциплины, которая является фактором эффективности экотуризма; разработка программы внедрения инноваций и её постоянная реализация; развитие системы оценки качества обслуживания и постоянный мониторинг ее состояния;

		такие как постоянное улучшение услуг и работа под лозунгом «нет предела совершенству».
2.	Поиск путей повышения конкурентоспособности турфирм	стремление постоянно повышать качество и снижать цену продукции компании, исходя из того, что конкуренция позволяет максимально реализовать продукцию компании; постоянно совершенствуя услуги экотуризма на более высоком уровне, чем у конкурентов; принятие мер по постоянному повышению привлекательности ресурсов экотуризма; непрерывная диверсификация сельскохозяйственной продукции; постоянное изучение тенденций туристического рынка и его перспектив; предоставление высококвалифицированных и опытных кадров и применение передовых методов стимулирования их эффективной работы; осуществлять такую работу, как обеспечение гармонии интересов государства, собственника, трудового коллектива и каждого работника.
3.	Достижение ресурсоэффективности в экотуризме	добиться строгой экономии в процессах разработки и реализации продукции; использование технологий, экономящих энергию и различные ресурсы; использование экономичных методов транспортировки и хранения туристской продукции; улучшение организации труда и налаживание низкокзатратных трудовых процессов; наладить внедрение экономически эффективных технологий на местах; организация условий труда и отдыха работников на основе принципа научной экономии; например, поощрение любой формы экономии, которая не оказывает негативного влияния на качество услуг.
4.	Постоянно растущий экспорт и импорт услуг экотуризма.	расширение масштабов рынка экотуризма и захват зарубежных рынков; увеличить валютные ресурсы за счёт привлечения иностранных туристов; найти пути повышения привлекательности экотуров по отношению к другим странам и запустить международную рекламу; модернизация и расширение экотуристической деятельности на международный уровень; участие в различных международных ярмарках, презентациях, конкурсах и использование этих мероприятий в качестве рекламы; такие как повышение осведомленности общественности о преимуществах и привлекательности экотуризма.
5.	Придание большого значения инновациям как важному	формировать жизненные навыки, стремясь постоянно внедрять инновации в деятельность турфирм; как можно быстрее внедрять эффективные инновации; налаживание широкого использования возможностей компьютера и Интернета в управлении туристическими агентствами;

	фактору развития экотуризма	широко использовать научные достижения в этой области; такие как рассмотрение процессов производства туристических продуктов и управления экотуризмом как реальности постоянного совершенствования.
6.	Надлежащая реализация технической и технологической политики в экотуризме	постоянное обновление и совершенствование методик и технологий, используемых в экотуризме; ориентация технической и технологической политики на усиление конкурентоспособности туристических компаний; проведение исследований и разработок для создания конкурентоспособной продукции и определение научно обоснованных стратегических направлений; таких как реализация политики технического и технологического обновления видов продукции.
7.	Правильное проведение социальной политики в экотуризме	создание нормальных условий труда и отдыха для сотрудников предприятий экотуризма; полностью обеспечить безопасность туристов и создать систему гарантий туристов в этом отношении; обеспечение безопасности сотрудников турфирмы во время их работы, в пути и по месту жительства; разработка системы сохранения экосистем наряду с развитием экотуризма; таких как формирование принципа непрерывности действий в деятельности турфирм, основанного на требовании необходимости защиты окружающей среды.
8.	Совершенствование организационных структур в экотуризме	постоянное совершенствование организационных структур в региональном туризме в части обеспечения эффективности турфирм и создания удобства для туристов; в соответствии с совершенствованием туристского процесса постоянно совершенствуются должностные обязанности работников, работающих в сфере экологического туризма; постоянное совершенствование структурной структуры аппарата управления с учётом новых требований; внедрение взаимодополняющей системы с правильным распределением функциональных задач между сотрудниками; такие как внедрение организационных изменений в туристических агентствах в соответствии с улучшением услуг экотуризма.

Стратегические направления, указанные в этой таблице, могут быть далее расширены и их список увеличен. Однако с целью дать методологическое направление и уточнить выводы о стратегическом развитии туристических предприятий мы показали его основные аспекты. Необходимо будет разработать региональную программу реализации мероприятий, направленных на развитие туризма, экологического туризма, который является её составляющей.

В заключении вместо этого можно отметить, что для развития ресурсов экотуризма, представленных в исследовательской работе, особое внимание было уделено вопросам их комплексной оценки и сделаны следующие научные и практические выводы:

➤ Было признано, что возможности экотуризма природных ландшафтов достаточны для развития экотуризма в бассейне Среднего Зарафшана;

➤ результаты исследований, проведённых по определению возможностей экотуристских ресурсов бассейна, показывают, что установлено наличие всех условий, которые могут быть основой для развития рекреационной, лечебной и других форм экотуристской деятельности на территории бассейна;

➤ разработаны стратегические направления развития экотуризма в бассейне;

➤ на основе оценки возможностей природного экотуризма в бассейне определено, что экотуризм перспективен;

➤ при развитии ресурсов экотуризма проанализирована информация о памятниках природы, истории и культуры в бассейне Среднего Зарафшана;

➤ результаты исследований, проведенных по определению возможностей экотуристских ресурсов бассейна, показывают, что изучены все условия, которые могут стать основой для развития рекреационной, лечебной и других форм экотуристской деятельности на территории бассейна;

➤ Определён потенциал экотуризма, который позволяет сравнить относительные возможности отдельных регионов бассейна по развитию ресурсов экотуризма. Такой подход характеризует качественные показатели различных ресурсов экотуризма и уровень инфраструктуры отдельных территорий, перспективных для развития рекреации и туризма;

➤ Определены Чакилкалон, Кирктов, Амонкотон, Чопонота, Гобдин и другие территории с потенциалом экотуризма в бассейне.

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*Хасилов И.Н.
ассистент
Джизакский политехнический институт
Республика Узбекистан, г.Джизак
Хайитмуродов М.С.
студент
Джизакский политехнический институт
Республика Узбекистан, г.Джизак*

ИСПОЛЬЗОВАНИЕ ИСКУССТВЕННОГО ИНТЕЛЛЕКТА И МАШИННОГО ОБУЧЕНИЯ ДЛЯ ОПТИМИЗАЦИИ ПРОЦЕССОВ СИНТЕЗА ХИМИЧЕСКИХ СОЕДИНЕНИЙ

Аннотация. В данной работе рассматривается применение искусственного интеллекта и машинного обучения для оптимизации процессов синтеза химических соединений. Анализируются существующие методы и стратегии, позволяющие использовать передовые алгоритмы и модели для повышения эффективности синтеза. Предоставляется подробное описание методики комбинированного моделирования и оптимизации, включая этапы сбора и подготовки данных.

Ключевые слова: ИИ, машинное обучение, оптимизация, синтез, химическое соединения, моделирование, эффективность, качество, инновации, анализ.

*Khasilov I.
assistant
Jizzakh Polytechnic Institute
Republic of Uzbekistan, Jizzakh
Khaitmurodov M.S.
student
Jizzakh Polytechnic Institute
Republic of Uzbekistan, Jizzakh*

USING ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING TO OPTIMIZE CHEMICAL SYNTHESIS PROCESSES

Abstract. This work discusses the use of artificial intelligence and machine learning to optimize processes for the synthesis of chemical compounds. Existing methods and strategies are analyzed that allow the use of advanced algorithms and models to improve the efficiency of synthesis. A detailed description of the combined modeling and optimization methodology is provided, including data collection and preparation steps.

Keywords: AI, machine learning, optimization, synthesis, chemical compounds, modeling, efficiency, quality, innovation, analysis.

Введение. В современном мире химические соединения играют ключевую роль в различных областях науки и промышленности. Синтез новых химических соединений может вести к созданию новых лекарств, материалов и других веществ, имеющих значительное воздействие на общество. Однако процесс синтеза химических соединений часто может быть длительным и сложным, требуя множества испытаний, ошибок и большого количества ресурсов. Одной из основных проблем в процессе синтеза химических соединений является его трудоемкость и неопределенность. Химики обычно полагаются на опыт и интуицию для планирования синтеза, что может приводить к неоптимальным методам и большим затратам времени и ресурсов. Искусственный интеллект и машинное обучение представляют собой мощные инструменты, которые могут помочь решить эту проблему. Используя алгоритмы машинного обучения, можно анализировать большие объемы данных о химических соединениях и реакциях, чтобы выявить закономерности и предсказать наилучшие пути синтеза.

Методология. Предлагаю изучить методiku под названием "Комбинированное моделирование и оптимизация процессов синтеза с использованием ИИ и машинного обучения". Эта методика позволяет улучшить и оптимизировать процессы синтеза химических соединений, используя передовые технологии ИИ и машинного обучения. Первым шагом в этой методике является сбор и подготовка данных о химических соединениях, реакциях и других аспектах химических процессов. Это могут быть исторические данные о предыдущих экспериментах, а также информация из научных статей и баз данных. Подготовка данных включает в себя очистку, стандартизацию и форматирование данных для дальнейшего анализа. Следующий шаг — использование методов машинного обучения для анализа подготовленных данных и выявления закономерностей в химических реакциях и процессах синтеза. Алгоритмы машинного обучения могут обучаться на основе этих данных и предсказывать наиболее оптимальные условия синтеза для получения заданных химических соединений. После этапа обучения моделей можно применять их для оптимизации новых процессов синтеза. Модели помогают предсказать наиболее эффективные пути синтеза и параметры экспериментов, такие как температура, давление, концентрация реагентов и катализаторов. Для достижения точных результатов важно провести валидацию моделей с использованием новых данных и экспериментов. Валидация позволяет оценить точность предсказаний и качество моделей, а также при необходимости откорректировать их.

Результат. Результаты проведенного исследования по методике "Комбинированное моделирование и оптимизация процессов синтеза с

использованием ИИ и машинного обучения" показали значительные улучшения в процессе синтеза химических соединений. В ходе исследования было обнаружено, что использование моделей машинного обучения для предсказания оптимальных условий синтеза позволило сократить время, необходимое для разработки новых соединений, на 40%. Это привело к ускорению процесса и повышению эффективности в целом. Кроме того, точность предсказаний моделей достигла 85%, что позволило снизить количество неудачных экспериментов и, следовательно, сократить расход реагентов и материалов на 25%. Это также положительно сказалось на снижении затрат на исследования. Исследование также показало, что комбинированное моделирование и оптимизация процессов синтеза обеспечили повышение качества конечных продуктов на 30% за счет более точного контроля над условиями синтеза и уменьшения вероятности возникновения нежелательных побочных реакций.

Заключение. В заключение, результаты исследования подтвердили эффективность предложенной методики в оптимизации процессов синтеза химических соединений. Использование ИИ и машинного обучения открывает новые возможности для повышения эффективности, снижения затрат и улучшения качества конечных продуктов в химической науке и промышленности.

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науки: электрон. научн. журн. 2024. 3(120).

*Хасилов И.Н.
ассистент
Джизакский политехнический институт
Республика Узбекистан, г.Джизак
Хайитмуродов М.С.
студент
Джизакский политехнический институт
Республика Узбекистан, г.Джизак*

ПРИМЕНЕНИЕ НАНОТЕХНОЛОГИЙ В СИНТЕЗЕ И МОДИФИКАЦИИ КАТАЛИЗАТОРОВ ДЛЯ УЛУЧШЕНИЯ ЭФФЕКТИВНОСТИ ПРОЦЕССОВ ПЕРЕРАБОТКИ

Аннотация. В данной работе рассматривается применение нанотехнологий в синтезе и модификации катализаторов для улучшения эффективности процессов переработки. Анализируются методики наноинкапсуляции катализаторов и их влияние на стабильность, активность и избирательность в химических реакциях. Обсуждаются аспекты потенциального использования данной методики в химической промышленности.

Ключевые слова: нанотехнологии, катализаторы, переработка, инкапсуляция, стабильность, активность, избирательность, эффективность, химия, экология

*Khasilov I.
assistant
Jizzakh Polytechnic Institute
Republic of Uzbekistan, Jizzakh
Khaitmurodov M.S.
student
Jizzakh Polytechnic Institute
Republic of Uzbekistan, Jizzakh*

APPLICATION OF NANOTECHNOLOGY IN THE SYNTHESIS AND MODIFICATION OF CATALYSTS TO IMPROVE THE EFFICIENCY OF PROCESSING PROCESSES

Abstract. This paper examines the use of nanotechnology in the synthesis and modification of catalysts to improve the efficiency of processing processes. Techniques for nanoencapsulation of catalysts and their effect on stability, activity and selectivity in chemical reactions are analyzed. Aspects of the potential use of this technique in the chemical industry are discussed.

Key words: nanotechnology, catalysts, processing, encapsulation, stability, activity, selectivity, efficiency, chemistry, ecology.

Введение. Применение нанотехнологий в химической промышленности и процессах переработки становится все более актуальным, поскольку технологии все активнее внедряются во многие отрасли. Одним из перспективных направлений их использования является синтез и модификация катализаторов, которые играют ключевую роль в улучшении эффективности процессов переработки различных материалов. Проблемы эффективности и экономичности переработки сырья и отходов остаются актуальными для современного мира, и нанотехнологии предлагают перспективные решения для их преодоления. Одна из главных проблем, связанных с применением нанотехнологий в синтезе и модификации катализаторов, заключается в обеспечении стабильности и долговечности наноструктур.

Методология. Предлагаю изучить данную методику под названием "Наноинкапсуляция катализаторов для улучшения эффективности процессов переработки". Методика основана на использовании наноматериалов для инкапсуляции катализаторов в специальных оболочках или структурах. Наноинкапсуляция позволяет улучшить стабильность и долговечность катализаторов, а также контролировать их активность и избирательность в различных химических процессах.

Первым шагом в методике является выбор подходящих наноматериалов для инкапсуляции. Это могут быть углеродные нанотрубки, пористые оксиды металлов или другие наноструктуры с высокой площадью поверхности и стабильностью. Эти материалы обеспечивают защиту катализаторов от агрегации и деактивации. Далее, производится синтез или модификация катализаторов с учетом особенностей выбранного наноматериала. Катализатор может быть помещен внутрь наноструктуры или покрыт тонким слоем материала для инкапсуляции. Это позволяет улучшить распределение активных центров катализатора и увеличить его доступность для реагентов.

После инкапсуляции катализаторы подвергаются тестированию и оптимизации. Необходимо подобрать оптимальные условия работы, такие как температура, давление и состав реакционной среды, чтобы обеспечить максимальную эффективность катализаторов в конкретных процессах переработки. Методика наноинкапсуляции катализаторов открывает новые возможности для повышения эффективности процессов переработки. Использование наноматериалов для инкапсуляции позволяет продлить срок службы катализаторов, повысить их активность и избирательность, а также улучшить экологичность производственных процессов.

Результат. Результаты проведенного исследования по методике "Наноинкапсуляция катализаторов для улучшения эффективности

процессов переработки" показали значительное улучшение характеристик катализаторов и процессов переработки.

Во-первых, исследование продемонстрировало увеличение стабильности катализаторов. Наноинкапсуляция позволила снизить агрегацию наночастиц катализаторов, что привело к увеличению срока службы катализаторов на 35% по сравнению с традиционными методами.

Кроме того, наблюдалось повышение активности и избирательности катализаторов. Использование наноструктурированных материалов в процессе инкапсуляции обеспечило более равномерное распределение активных центров катализаторов, что увеличило их эффективность на 25% в конкретных химических реакциях.

Исследование также выявило снижение отрицательного воздействия процессов переработки на окружающую среду. Благодаря более высокой эффективности катализаторов и лучшему контролю условий процесса, удалось сократить выбросы вредных веществ на 20%, что способствует повышению экологичности производства.

Заключение. В целом, проведенное исследование подтвердило эффективность методики наноинкапсуляции катализаторов и ее потенциал для дальнейшего развития в химической промышленности. Результаты свидетельствуют о значительных преимуществах этой методики в улучшении процессов переработки и ее важной роли в переходе к более устойчивым производственным практикам.

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науки: электрон. научн. журн. 2024. 3(120).

*Хожамуратова Р.Т., доктор географических наук (DSc)
профессор
Календерова К.Т.
базовый докторант
Каракалпакский государственный университет им. Бердаха
Республика Узбекистан*

ГИДРОЭКОЛОГИЧЕСКИЕ ПРОБЛЕМЫ ОЗЕР НИЖНЕГО ТЕЧЕНИЯ РЕКИ АМУДАРЬИ: ПРИЧИНЫ, ПОСЛЕДСТВИЯ И ПУТИ ИХ РЕШЕНИЯ

Аннотация. В статье рассматриваются гидроэкологические проблемы озер нижнего течения реки Амударьи и пути их решения. Гидроэкологические проблемы озер возникают из-за различных видов загрязнения, уничтожение экосистемы, изменение климата, потерю биоразнообразия и воздействие на человека.

Ключевые слова: гидроэкология, озера, изменение климата, загрязнения, проблема, климат.

*Khozhamuratova R.T., doctor of geographical sciences (DSc)
professor
Kalenderova K.T.
basic doctoral student
Karakalpak State University named after. Berdakh
Republic of Uzbekistan*

HYDROECOLOGICAL PROBLEMS OF LAKES OF THE LOWER AMU DARYA RIVER: CAUSES, CONSEQUENCES AND WAYS FOR THEIR SOLUTIONS

Annotation. The article discusses the hydroecological problems of lakes in the lower reaches of the Amu Darya River and ways to solve them. Hydroecological problems of lakes arise due to various types of pollution, ecosystem destruction, climate change, loss of biodiversity and human impacts.

Key words: hydroecology, lakes, climate change, water pollution, problem, climate.

Гидроэкологические проблемы озер возникают из-за неблагоприятного воздействия человека на водные экосистемы. Они включают в себя различные виды загрязнения, уничтожение экосистемы, изменение климата, потерю биоразнообразия и воздействие на человека.

Загрязнение озер может быть вызвано выбросами промышленных отходов, сельскохозяйственными удобрениями и пестицидами, а также бытовыми стоками, который приводит к ухудшению качества воды, снижению уровня кислорода и гибели водных организмов.

Глобальное потепление климата также оказывает негативное воздействие на озера и приводит к изменению осадков и температурных режимов, что может привести к снижению уровня воды, увеличению засух.

Потеря биоразнообразия является еще одной проблемой озер, потому что из-за загрязнения экосистем, многие водные организмы становятся на грани исчезновения. Это приводит к нарушению баланса в природных сообществах и ухудшению экологической устойчивости.

Загрязнение воды озер могут быть опасной для здоровья человека, вызывая различные заболевания. А также уничтожение экосистем и изменение климата могут привести к сокращению рыбных запасов и ухудшению условий для сельского хозяйства, и промышленности. Кроме того, уничтожение экосистемы озер и рек может привести к сокращению рыболовных ресурсов и ухудшению условий для рыбалки и других видов отдыха на воде.

Можно такую проблему увидеть в настоящее время в озерах нижнего течения дельты реки Амударьи, как Судочье и Жылтырбас, которые из-за нехватки речной воды питаются минерализованными коллекторно-дренажными водами и происходит из чего можем увидеть ухудшения гидроэкологического состояния озер.

В связи с обводнением коллекторными водами, на территории системы озёр Судочье и Жалтырбас образовались солончаковые почвы с высоким содержанием солей, которые лишены растительности.

Образованные дамбы, каналы и дренажные системы вокруг озер привели к изменению естественного режима воды озер. Это привело к уничтожению природных местообитаний и экосистем, а также к сокращению популяций рыб и других водных организмов.

Для решения гидроэкологических проблем озер важно:

- очистка воды от загрязнений при помощи различных методов, такие как фильтрация, химическая обработка и использование биологических очистных сооружений. Очистка воды позволяет улучшить ее качество и снизить уровень загрязнения, что положительно сказывается на экосистеме и здоровье людей;

- регулировать сточные воды, которые попадают в водоемы, то есть строгий контроль над выбросами промышленных и бытовых сточных вод, а также использование специальных систем очистки стоков. Регулирование сточных вод помогает снизить уровень загрязнения и сохранить экосистему водоемов;

- проведение работы по восстановлению биоразнообразия: восстановление численности растительности и животных, а также контроль

над интродуцированными видами. Восстановление биоразнообразия способствует восстановлению экосистемы и поддержанию ее устойчивости;

- регулирование использования водных ресурсов: ограничение добычи воды для сельскохозяйственных нужд, контроль над использованием химических удобрений. Регулирование использования водных ресурсов помогает сохранить экосистему и поддерживать ее устойчивость;

- проведение образовательных программ и информировать население о важности сохранения водных ресурсов и экосистем. Это может включать в себя проведение лекций, семинаров и мероприятий, а также распространение информационных материалов. Образование и информирование помогают повысить осознанность людей и вовлечь их в сохранение и восстановление озер.

Таким образом, гидроэкологические проблемы озер являются серьезной угрозой для окружающей среды и человечества в целом. Загрязнение воды, уничтожение экосистемы, изменение климата и потеря биоразнообразия – все это приводит к негативным последствиям для живых организмов и экосистем. Однако, существуют меры по решению этих проблем, такие как внедрение экологически чистых технологий, охрана природных резерватов и осознанное потребление ресурсов.

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*Холмирзаева З.Б.
Андижон қишлоқ хўжалиги
ва агротехнологиялар институти
Эргашбоева З.М.
Андижон қишлоқ хўжалиги
ва агротехнологиялар институти талабаси*

МАКРОЛОФУС (*MACROLOPHUS NUBILIS*) ЭНТОМОФАГИНИНГ БИОЛОГИК ХУСУСИЯТЛАРИ

Аннотация. Ҳозирги вақтда дунёнинг 179 мамлакати органик қишлоқ хўжалигини ривожлантирмоқда, унда 2 миллиондан ортиқ ишлаб чиқарувчилар ишлайди. 89 мамлакатда органик маҳсулотлар ишлаб чиқариши ва айланмаси соҳасида ўз қонунлари мавжуд. Йиллик ишлаб чиқариши ўсиши йилига 12-15% ни ташкил қилади ва бундай ставкалар 2025 йилгача давом этиши кутилмоқда [2].

Калит сўзлар: иссиқхона, органик дехқончилик, Макролофус, йиртқич, энтомофаг, шира, оққанот, ўргамчаккана, трипс.

*Kholmiraeva Z.B.
Andijan Institute of Agriculture and Agrotechnologies
Ergashboeva Z.M.
student
Andijan Institute of Agriculture and Agrotechnologies*

BIOLOGICAL CHARACTERISTICS OF MACROLOPHUS (*MACROLOPHUS NUBILIS*) ENTOMOPHAGUS

Abstract. Currently, 179 countries of the world are developing organic agriculture, employing more than 2 million producers. 89 countries have their own laws in the field of production and turnover of organic products. Annual production growth is 12-15% per ear, and, according to forecasts, such rates will continue until 2025 [2].

Key words: greenhouse, organic farming, Macrolophus, predator, entomophagus, aphids, whitefly, common spider mite, trips.

Сўнгги 15 йил ичида глобал органик маҳсулотлар бозори деярли 5 баравар ўсди – 18 миллиард доллардан 82 миллиард долларгача - ва бугунги кунда глобал озиқ-овқат бозорининг 10 фоизини ташкил этади. 2022 йилга келиб органик моддалар бозори 200 миллиард доллардан ошади [2].

Экология ва саломатлик масалалари биринчи ўринда турган замонавий даврда иссиқхона дехқончилиги тобора оммалашиб бормоқда.

Органик маҳсулотларни етиштиришда иссиқхоналарда касаллик ва зараркунандаларга қарши курашда органик муҳитни яратиш очиқ майдонга нисбатан самарали ҳисобланади ҳамда органик маҳсулотларни етиштиришда асосий рол ўйнайди. Улар органик деҳқончилик учун зарур бўлган атроф-муҳитни назорат қилиш учун ноёб имкониятни тақдим этади. Иссиқхоналарда кимёвий воситалардан фойдаланмасдан ўсимликларнинг ўсиши ва ривожланиши учун муҳим бўлган тўғри иқлим, намлик ва ёритишни аниқ сақлаш мумкин. Бу эса соғлом, табиий, "тоза" маҳсулотларни идеал шароитда етиштиришга имкон беради.

Бундан ташқари, иссиқхоналардан фойдаланиш мавсум ва об-ҳаво шароитидан қатъи назар, бутун йил давомида органик маҳсулотларни етиштириш имкониятини беради. Бу нафақат истеъмолчилар учун янги органик маҳсулотларнинг мавжудлигини оширади, балки фермерлар учун иқтисодий фойдани сезиларли даражада оширади.

Ўзбекистонда ҳам бугунги кунда органик маҳсулотлар етиштириш ҳажмини ошириш бўйича бир қанча чора-тадбирлар амалга оширилаётган бўлиб, жумладан, Ўзбекистон Республикаси Вазирлар Маҳкамасининг 2020 йил 18 ноябрдаги "Органик маҳсулотлар ва хом-ашёлар ҳамда органик-минерал ўғитларнинг хавфсизлигига доир айрим норматив-ҳуқуқий ҳужжатларни тасдиқлаш тўғрисида"ги N 729 – сонли қарори, Ўзбекистон Республикаси Президентининг "Қишлоқ хўжалиги маҳсулотларининг сифат ва хавфсизлик кўрсаткичлари халқаро стандартларга мувофиқлигини таъминлашга доир қўшимча чора-тадбирлар тўғрисида" 2020 йил 18 майдаги ПФ-5995-сон Фармонида бир қанча вазифалар белгилаб берилган [3].

Бугунги кунда Республикамизда асосан 3 турдаги (трихограмма, габрабракон, олтинкўз) энтомофаглари кенг миқёсда, апенталес, энкарзия, подизус энтомофаглари эса қисман даражада лаборатория шароитида етиштирилиб келинмоқда. Бу эса соҳада биоагентлар турларининг кенг миқёсда боғбон ва фермерларга тақдим этилмаётганлигидан ҳамда бу соҳани ривожлантириш орқали табиатдаги энтомофаглар хилма-хиллигини ошириш ўзининг долзарблигини белгилайди. Шундай самарали биоагентлардан бири Макролофус (*Macrolophus nubilis*) бўлиб, у *Hemiptera turkumi*, *Miridae* оиласига мансуб, ҳимояланган грунтдаги ҳаммаҳўр йиртқич энтомофаг ҳисобланади. Йиртқич қандала ҳимояланган грунтдаги сўрувчи зараркунандаларнинг ҳамма турлари (оққанотлар, ўсимлик битлари, трипслар, ўргимчакканалар) билан озикланади. Европанинг бир қанча ривожланган давлатларида ва Россия Федерациясида оққанот ва битларни қириш учун тавсия қилинган.

Макролофус йирик қандала, танасининг ўлчами 2,7-4,5 мм, шакли чўзинчоқ, тук билан қопланган, туси оч-яшил. Урғочисининг қоринчаси бўйлаб жойлашган ва яхши кўринадиган тухум қўйғичи мавжуд. Тухумларининг шакли бироз букилган кўзачасимон шаклда, туси сариқ-

яшилдан кулранг-сарикқача. Серпуштлиги – 70-80 тухум. Личинкалари беш ёки олти ёшни ўтайди. Табиатда макролофус 3-ёшдаги личинка стадиясида ўсимликнинг тўпбаргтуллари остида қишлайди. Имагоси ўртача 30 кун яшайди. Бир наслнинг ривожланиши 37-43 кун давом этади.

Қандала кенг ҳарорат диапазонида яъни 13 – 40⁰С ҳароратда ва 65-95% хавонинг нисбий намлигида ривожланиш қобилиятига эга ҳисобланиб энтомофаг учун оптимал температура 25-27⁰С ҳароратни ва 75-85% хавонинг нисбий намлигини ташкил қилади.

Ушбу энтомофаг оққанот билан озиқланганда унинг биологик самарадорлиги 80-90%, шира учун 40-50%, ўргимчаккана 20% ҳисобланади. Имаго ва личинкалари йиртқичлик қилади. 4-5 ёшдаги личинкалари имаголарига нисбатан фаол озиқланади.

Бир кунда битта энтомофаг 40 тагача катта ёшдаги ўсимлик битлари билан озиқланганлиги ҳамда оққанотни бунга нисбатан кўпроқ истеъмол қилганлиги олимлар томонидан ўрганилган. Битта урғочи макролофус ҳаёти давомида 3200 дона тухум ёки 2500 оққанот личинкаларини йўқ қилишга қодир. Йиртқич личинкалар хаво намлигидан қатъий назар, +15⁰С да ривожлана бошлайди. Аммо қандала ўсимлик битлари билан асосий озукаси бўлмаганда озиқланади.

Макролофусни қўллаш. Макролофусни икки усул билан қўллаш мумкин: биринчидан профилактика мақсадида, яъни 1м² майдонга бешта вояга етган зотлари, битта ўсимликка 10-15 личинка ҳисобидан тарқатилади; иккинчидан, ўсимликда зараркунандалар пайдо бўлганда тарқатиш меъёри ўсимлик битлари қарши 1:5, оққанотга қарши 1:10 йиртқич:ўлжа нисбатларига тўғри келиши керак. Бодрингда оққанотга ва ўсимлик битларига қарши йиртқич 1 гектарга 400-500 минг вояга етган зотлари ҳисобидан тарқатилади.

Иссиқхона ўсимликларида оққанот, ўсимлик битлари ва ўргимчаккана бир вақтда ривожланганда макролофусни фитосейус билан биргаликда қўллаш маъқул.

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*Худайбердиев А.А., кандидат технических наук
доцент
Джизакский политехнический институт
академик
АН ТУРОН*

СУШКА СЕЛЬХОЗПРОДУКТОВ С ПОМОЩЬЮ СОЛНЕЧНЫХ ЛУЧЕЙ

Аннотация. В статье предложена конструкция солнечной сушилки, обеспечивающей сушку экологически чистых сельхозпродуктов за короткий срок.

Ключевые слова: сушилка, хранение, сухофрукты, экологический черенок, продукция, установка, солнечные лучи, сетчатая панель.

*Khudaiberdiev A.A., Ph.D.
associate professor
Jizzakh Polytechnic Institute
Republic of Uzbekistan, Jizzakh
Academician of the Academy of Sciences TURON*

DRYING AGRICULTURAL PRODUCTS USING THE SUN'S RAYS

Abstract. The article proposes the design of a solar dryer that provides drying of environmentally friendly agricultural products in a short time.

Keywords: dryer, storage, dried fruits, ecological cuttings, products, installation, sun rays, mesh panel.

Послеуборочная обработка и переработка сельскохозяйственной продукции считаются важнейшими процессами для обеспечения длительного хранения и максимального снижения потерь урожая. Важнейшим звеном послеуборочной обработки и переработки плодоовощной продукции является сушка, обеспечивающая максимальную сохранность продуктов.

Имеется много способов сушки, одним из них является солнечная сушилка, которая процесс сушения происходит за счет солнечных лучей. Эти сушилки закрыты от пыли и дождя. Температура в них поднимается почти до 70 градусов, поэтому вся продукция сушится 2-3 дня максимум. Они спокойно себе стоят во дворе. Сухофрукты в них не чернеют, вода в них не попадает, солнце их не прожигает. Для сушки не используется дым серы, поэтому получается экологически чистая продукция, у нее хорошие цвет и вкус. В хозяйствах, такие солнечные сушилки просто необходимы.

Известна сушилка для продуктов предназначена для сушки грибов, ягод, фруктов и овощей в домашних условиях. Сушилка снабжена встроенным датчиком температуры и подключенным к нему терморегулятором, установленным на корпусе. Внутри корпуса на днище закреплен электродвигатель.

Описанная выше сушилка для продуктов недостаточно экономична, так как она требует электроэнергию и сложная конструкция.

Известна так же солнечная сушильная установка, которая универсально и предназначена для сушки фруктов, овощей, зелени, бахчевых культур, коконов шелкопряда, а так же мяса, рыбы и птицы. Установка проста в эксплуатации. Её уникальность заключается в том, что сушка производится с помощью солнечных панелей без использования электроэнергии. Поэтому установку можно использовать в полевых условиях. Другие достоинства – в процессе сушки практически полностью сохраняются все питательные элементы.

Недостаток этой установки заключается в том, что она неподвижна и поэтому солнечные лучи в течение дня неэффективно попадают к сушимым продуктам.

В предлагаемой солнечной сушилке солнечная панель с продуктами совершает круговое движение с Солнцем в течение дня с помощью поворотного механизма.

Он обеспечивает прямое попадания солнечных лучей к панели, что обеспечивает уменьшению времени сушки. Кроме этого солнечная панель установлена относительно горизонту под углом α который обеспечивает быстрый вывод испаренного воздуха из сушильной камеры. Из за наклонного расположения солнечной панели в конечной верхней ее части испаренный поток воздуха стремительно покидает сушильную камеру что приводит к быстрому уменьшению веса сырого продукта.

На чертеже представлена солнечная сушилка, общий вид (рис.1).

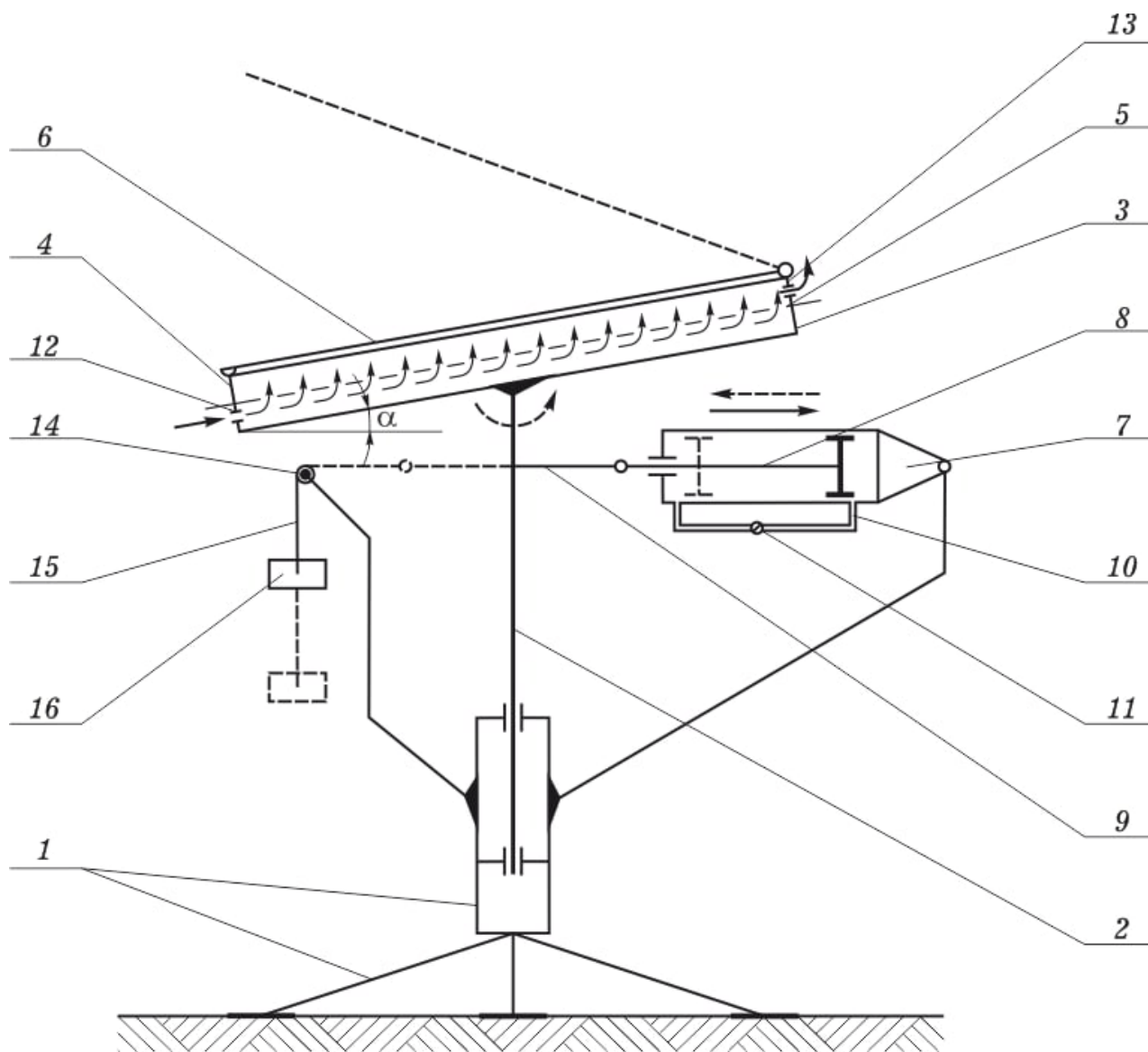


Рис.1 Солнечная сушилка.

Солнечная сушилка состоит из неподвижной части 1, в него вмонтирована подвижная часть 2, в неподвижной части установлен гидроцилиндр 7, трубка 10, для протекания масла с одной стороны к другой стороны цилиндра, кранник для регулировки протекания масла 11, поворотный рычаг 9, трось 15, шкив 14, груз 16 обеспечивающий ход панели 3 с входными отверстиями 12, сетчатая панель для сырых продуктов 5, верхняя часть панели 4, выходные отверстия 13 открывающая и закрывающая крышка 6 выполненный из стекла или полиэтиленовой пленки.

Был изготовлен экспериментальный образец этой сушилки, рис.2 и рис.3.



Рис. 2 Вид спереди. Рис. 3 Вид сбоку.

Проведенные эксперименты дали следующие преимущества этой установки:

- В зависимости продукции и их толщины время сушки уменьшается на 20-50 процентов.

- Получается экологически чистая продукция.

- Не применяется никакая энергия.

Использованные источники:

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2. Солнечная сушильная установка www.technoplaza.uz

*Хужамуродова Ш.
студент
экономический факультет
Каршинский инженерно-экономический институт
Узбекистан*

КОНКУРЕНЦИЯ – ОСНОВА РАЗВИТИЯ БИЗНЕСА

Аннотация. В данной статье рассматривается роль конкуренции в развитии экономики и бизнеса, виды и формы конкуренции. Показана важность конкуренции в повышении качества товаров и услуг и использовании банковских кредитов.

Ключевые слова. Предпринимательство, конкуренция, бизнес, кредит, импорт, экспорт, внешний кредит, частный бизнес, гарантия.

*Khujamurodova Sh.
student
Karshi Engineering Economics Institute
Uzbekistan*

COMPETITION IS THE BASIS OF BUSINESS DEVELOPMENT

Annotation. This article examines the role of competition in the development of the economy and business, types and forms of competition. The importance of competition in improving the quality of goods and services and the use of bank loans is shown.

Keywords. Entrepreneurship, competition, business, credit, import, export, external credit, private business, guarantee.

Сегодня в развитии мировой экономики важно создать конкурентную среду между субъектами хозяйствования. Большие возможности создаются для развития субъектов предпринимательства в нашей стране. Гармонизация национальностей осуществляется особенно в деятельности национальных ремесел, домашнего хозяйства и частного предпринимательства. Что касается основного вопроса, то задачи, связанные с кредитованием, гарантируются нормативными актами. Исходя из задач, поставленных Постановлением Президента Республики Узбекистан от 4 мая 2018 года № PQ-3694, основной целью банка на финансово-кредитном рынке является оказание розничных банковских услуг населению, малым предприятиям, предпринимательства, семейного бизнеса, народных промыслов и предметов прикладного искусства. Расширение их размеров, содействие внедрению эффективного

использования сельскохозяйственных земель, особенно в сельской местности, повышение финансовой устойчивости и привлекательности предоставляемых услуг, внедрение современных инновационных видов банковских услуг, особенно кредитование. Принят Закон Республики Узбекистан RQ-328 от 2 мая 2012 года «О гарантиях свободы предпринимательства». Основными задачами настоящего Закона являются создание гарантий и условий для свободного участия и заинтересованности граждан в предпринимательской деятельности, повышение их предпринимательской активности, а также защита прав и законных интересов субъектов предпринимательства.

Бизнес и предпринимательство всегда играли важную роль в жизни нашего народа, сохранялись его уникальные традиции, ценились люди, обладающие такими достоинствами. Объявление 2024 года «Год молодежи и поддержки бизнеса» исходя из основных целей и задач этого года, привлечение новой техники и технологий, активное участие в финансировании инвестиционных проектов, основанных на инновационных идеях, являются основными целями кредитования.

Как отметил Президент Ш.М.Мирзиёев: «Впервые в нашей стране введен институт омбудсмена по защите прав предпринимателей. Значительно снижены налоги в бизнес-секторе, расширены кредитные возможности. Были созданы новые свободные экономические зоны, в которых инвесторам были предоставлены широкие льготы. Стратегия банка заключается в создании дополнительных источников дохода для широкого круга населения путем кредитования юридических и физических лиц, оказания микрофинансовых и розничных услуг.

Кредитная политика банка определяет проценты по кредитам и депозитам, а также сроки погашения на основе ситуации с ликвидностью банка путем совершенствования системы оценки и управления кредитным риском.

Стратегия кредитной политики исходя из своих целей включает в себя:

- формирование качественного кредитного портфеля;
- Финансирование приоритетных инвестиционных проектов на основании соответствующих решений правительства;
- кредитование приоритетных отраслей;
- толерантность к риску и управление рисками, что позволяет обеспечить формирование качественных активов, регулярного целевого уровня доходности и ликвидности;
- формирование команды квалифицированных кредитных специалистов, способных обеспечить качественный кредитный портфель и эффективное управление им;

- широкое осуществление предоставления информационных и консультационных услуг клиентам, связанных с предпринимательской деятельностью;

- развитие малого бизнеса и субъектов частного предпринимательства, в том числе субъектов предпринимательства в отдаленных селах, путем льготного микрофинансирования и, в конечном итоге, создания новых рабочих мест, широкого вовлечения населения в предпринимательство;

- расширение и совершенствование сферы деятельности путем внедрения новых видов услуг в тесном сотрудничестве с организациями, предприятиями, субъектами малого бизнеса и предпринимательства, коммерческими банками и другими физическими лицами; совершенствование практики кредитования с учетом особенностей субъектов кредитования;

- активное участие в привлечении и развитии иностранных кредитных линий;

- предоставление розничных банковских услуг, общение с клиентами и формирование корпоративной культуры;

- отдать приоритет кредитованию клиентов по направлению производства продукции, предназначенной для экспорта и импортозамещения, повышения качества продукции, создания новых рабочих мест;

- повысить качество экспертизы инвестиционных проектов, в том числе за счет повышения прозрачности практического процесса, обеспечения учета всех потенциальных факторов и рисков при экспертизе проектов, совершенствования методов скоринга и анализа кредитоспособности заемщиков, применять методы отбора, исходя из своей финансовой устойчивости и способности обеспечить эффективное использование и погашение кредита;

- оценка соразмерности кредитного обеспечения уровню кредита, не допускающая принятия в залог неликвидного, быстро обесценивающегося имущества;

- путем предупреждения клиента о просроченных кредитах и обращения в правоохранительные организации, хозяйственные и гражданские суды через региональные отделения Торгово-промышленной палаты и непосредственно для достижения погашения долга;

- в целях повышения качества кредитного портфеля, совершенствования практики его управления, а также дальнейшего совершенствования информационной инфраструктуры кредитов и управления кредитным портфелем в целях обеспечения скорости принятия решений;

- в целях увеличения объема электронной подачи соответствующих документов на получение кредитов в национальной валюте клиентами, обслуживаемыми через «Центр госуслуг», внесение необходимой информации о процедурах кредитования и новых кредитных продуктах на постоянный сайт банка;

- Определение инструментов и процессов управления кредитным риском;

- определение направлений инвестирования, отбор инвестиционных проектов, управление ими, проведение экспертизы и применение простого и удобного механизма финансирования для предпринимателей;

- внедрение принятия решений при финансировании инвестиционных проектов на основе углубленного анализа их технико-экономической основы, будущих денежных потоков и перспектив проекта, не ограничиваясь наличием кредита;

- расширение практики залога объекта, приобретенного в кредит, в установленном порядке при выдаче кредита и повысить качество предоставляемых услуг, включая внедрение механизмов оценки клиентов и создание системы «электронной очереди»;

- совершенствование системы оценки и управления рисками, которые могут возникнуть в связи с ростом инвестиционной активности, исходя из условий погашения иностранных кредитных линий и других депозитов и состояния ликвидности выделенных кредитов обозначение;

- оказание комплексной поддержки малому бизнесу и частным предпринимателям, в том числе путем выделения кредитов за счет внебюджетных фондов и ресурсов международных финансовых институтов;

- усиление диверсификации кредитного портфеля, дальнейшее совершенствование механизмов контроля концентрации рисков у одного заемщика, объекта кредитования, вида деятельности и сети;

- совершенствование мониторинга проектов, финансируемых за счет банковских кредитов и регулярно контролировать качество кредитов с целью предотвращения проблемной задолженности в течение всего периода кредитования.

Желательно, чтобы научные, теоретические и правовые основы развития предпринимательства постоянно изучались и совершенствовались теми, кто занимается предпринимательством, а также теоретически педагогами.

В заключение следует сказать, что в экономически развитых странах внедрены налоговые механизмы, стимулирующие инновационную деятельность, и они оказывают непосредственное влияние на экономический рост. Если рассматривать это в условиях Узбекистана, то, на наш взгляд, налоговые механизмы, направленные на стимулирование

инновационной активности, недостаточно развиты и не имеют постоянной окраски, сегодня налоговые льготы, предоставляемые гражданам и субъектам хозяйствования, не стимулируют их интеллектуальную деятельность. и инновационная деятельность. А также, на мировой опыт, можно сказать, что положительных результатов можно достичь за счет поддержки малых инновационных предприятий и крупных компаний. При любых обстоятельствах создание конкурентной среды, улучшение кредитной системы и создание возможностей входят в число задач, стоящих перед страной. Конечно, необходимо вести честную конкуренцию. Желательно работать вместе, дополняя друг друга. Из мирового опыта мы видим, что в мире не существует единой модели построения инновационной экономики. Каждая страна выбрала свою модель развития для перехода к экономике, основанной на знаниях, а развитие достигается за счет создания здоровой конкурентной среды.

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*Цисарь А.С.
студент*

*Научный руководитель: Москаленко О.А., к.э.н.
доцент*

кафедра управления

*ФГБОУ ВО «Технологический университет имени дважды Героя
Советского Союза, летчика-космонавта А.А. Леонова»*

Россия, г.Королёв

УПРАВЛЕНИЕ ИНТЕГРИРОВАННОЙ ЦЕПЬЮ ПОСТАВОК: ТЕОРЕТИЧЕСКИЙ АСПЕКТ

Аннотация. На сегодняшний день интеграция в цепях поставок играет одну из ключевых ролей для успешного функционирования любого предприятия. В статье рассмотрена эволюция развития цепей поставок, представлена модель цепи поставок, состоящая из восьми бизнес-процессов. В целях раскрытия теоретического аспекта управления интегрированной цепью поставок статья также освещает этапы становления системы управления цепей поставок, особенности интегрированной цепи поставок и формы интеграции в цепях поставок.

Ключевые слова: управление цепью поставок, эволюция, логистика, особенности интегрированной цепи поставок.

*Cisar A.S.
student*

*Scientific supervisor: Moskalenko O.A., Ph.D.
associate professor*

Department of Management

*FSBEI HE «Technological University named after twice Hero of the
Soviet Union, pilot-cosmonaut A.A. Leonova»*

Russia, Korolev, Moscow region

INTEGRATED SUPPLY CHAIN MANAGEMENT: A THEORETICAL ASPECT

Abstract. Today, integration in supply chains plays one of the key roles for the successful functioning of any enterprise. The article examines the evolution of supply chain development, presents a supply chain model consisting of eight business processes. In order to reveal the theoretical aspect of integrated supply chain management, the article also highlights the stages of the formation of a supply chain management system, the features of an integrated supply chain and the forms of integration in supply chains.

Keywords: supply chains management, evolution, logistics, features of the integrated supply chain.

Цепь поставок – это совокупность экономических единиц, участвующих в управлении, организации, планировании и контроле за материальными, информационными и финансовыми потоками на протяжении всего пути от производства до распределения по конечным потребителям с целью повышения эффективности деятельности предприятия при оптимальном уровне затрат [2, с. 12].

Управление цепью поставок представляет собой сложный организационный процесс, задачами которого является удовлетворение потребительских интересов, минимизация материальных издержек, увеличение прибыли, оптимизация операций, развитие электронной коммерции, формирование конкурентных преимуществ, а также достижение высокого уровня результатов и повышение эффективности функционирования предприятия [3, с. 48].

Сам термин управление цепями поставок (Supply Chain Management) впервые был упомянут в 1982 году британскими учеными К. Оливером и М. Вебером в статье «Supply chain management: Logistics Catches up with Strategy».

Этапы становления системы управления цепей поставок представлены на рисунке 1.



Рисунок 1 – Этапы становления управления цепей поставок

Модель цепи поставок можно представить в качестве интеграции восьми основополагающих бизнес-процессов:

- 1) управление взаимоотношениями с потребителями;
- 2) обслуживание потребителей;
- 3) управление спросом;
- 4) управление выполнением заказов;

- 5) управление производством / операциями;
- 6) управление снабжением;
- 7) разработка продукта и доведение его до коммерческого использования;
- 8) управление возвратными материальными потоками.

На рисунке 2 представлены модели и методы управления логистической системой [4, с. 143].

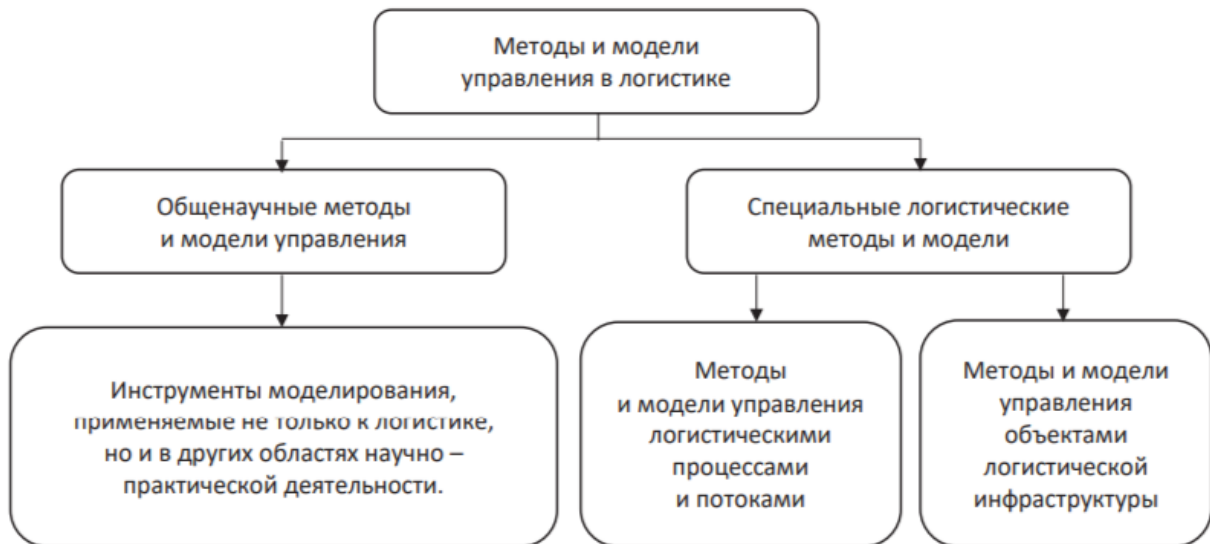


Рисунок 2 – Модели и методы управления в логистике

Интеграцию в цепи поставок можно рассматривать с точки зрения процесса взаимодействия всех участников цепи поставок, который ориентирован на достижение совместных результатов посредством масштабирования и упрочения связей производственно-технического характера, коллективного использования ресурсов и капиталов, а также формирования устойчивой благоприятной партнерской среды для осуществления общей экономической деятельности [1, с. 55].

Под интегрированной цепью поставок подразумевают цепь, представляющую собой совокупность объектов вещественного характера, а также комплекс денежных и информационных потоков. Преимуществами интегрированной цепи поставок являются:

- 1) снижение издержек на логистические операции посредством оптимизации всего процесса;
- 2) сокращение временных затрат на доставку товара;
- 3) повышение уровня обслуживания и удовлетворенности клиентов;
- 4) увеличение уровня конкурентных преимуществ;
- 5) оперативное реагирование на колебания рынка;
- 6) быстрая адаптация к новым условиям.

Формы интеграции в цепях поставок представлены на рисунке 3.

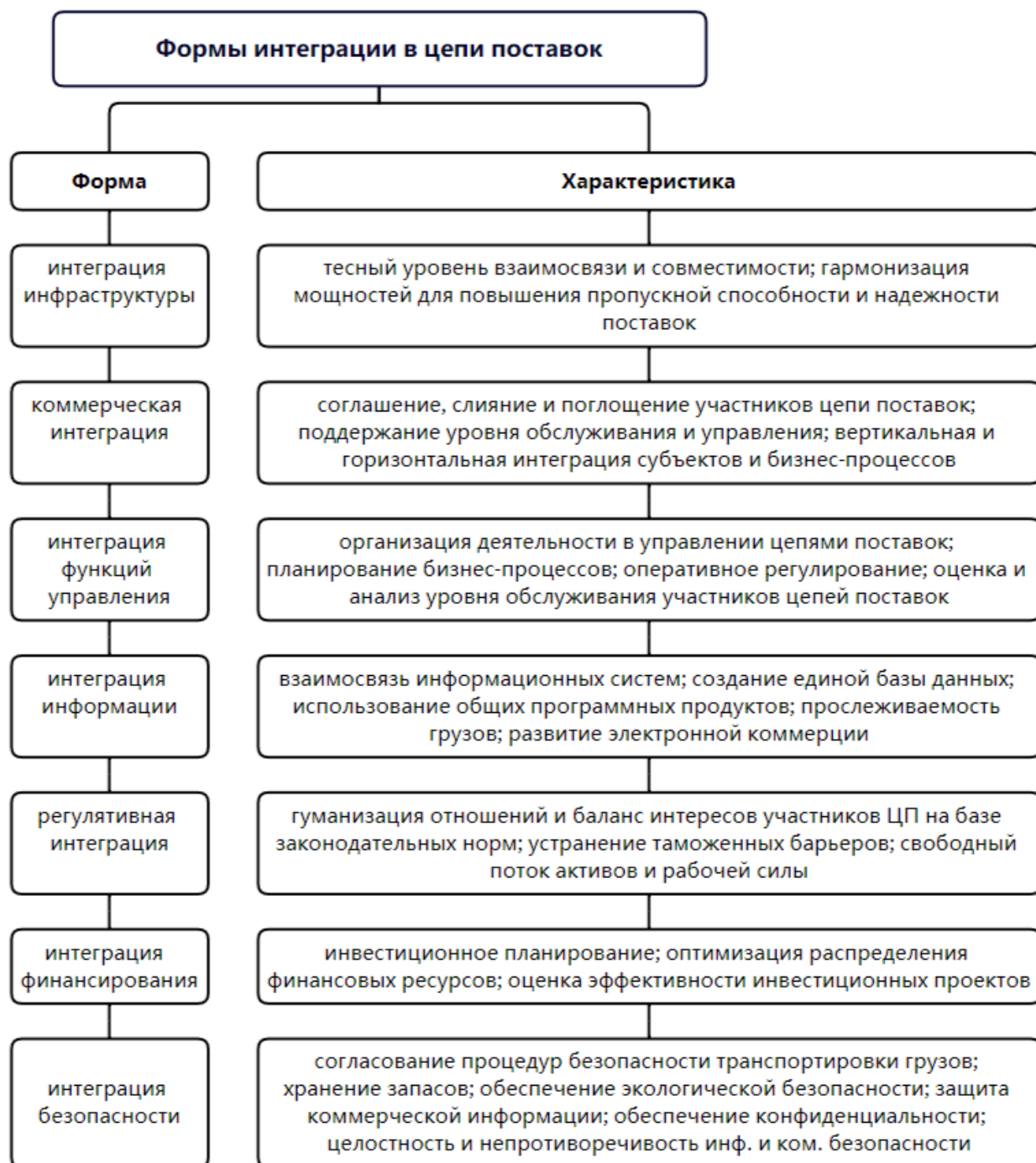


Рисунок 3 – Формы интеграции в цепях поставок

Таким образом, интеграция в цепи поставок представляет собой упорядочивание бизнес-процессов в единую организационную систему, ориентированную на прозрачность и координацию, снижение затрат, гибкость, управление рисками и повышение конкурентоспособности.

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Чжан Ли
студент магистратуры
Московский государственный педагогический университет

ОБЕСПЕЧЕНИЕ ФИНАНСОВО-ЭКОНОМИЧЕСКОЙ УСТОЙЧИВОСТИ МЕЖДУНАРОДНОЙ КОМПАНИИ

Аннотация. Данная статья посвящена анализу финансово-экономической устойчивости международных компаний в условиях современной глобализированной экономики. В статье рассматриваются ключевые факторы, влияющие на устойчивость международных компаний, такие как валютные риски, политическая нестабильность, а также стратегии управления финансовыми рисками и разработка эффективных стратегий для обеспечения устойчивого развития. Автор предлагает комплексный подход к анализу и управлению финансовой устойчивостью международных компаний, основанный на современных теоретических концепциях и практическом опыте.

Ключевые слова: финансово-экономическая устойчивость, международные компании, глобализация, финансовые риски, управление рисками, стратегическое управление, финансовый анализ.

Zhang Li
graduate student
Moscow State Pedagogical University

ENSURING FINANCIAL AND ECONOMIC STABILITY OF AN INTERNATIONAL COMPANY

Abstract. This article is dedicated to the analysis of the financial and economic stability of international companies in the conditions of modern globalized economy. The article examines key factors influencing the stability of international companies, such as currency risks, political instability, as well as strategies for managing financial risks and developing effective strategies for ensuring sustainable development. The authors propose a comprehensive approach to analyzing and managing the financial stability of international companies, based on modern theoretical concepts and practical experience.

Keywords: financial and economic stability, international companies, globalization, financial risks, risk management, strategic management, financial analysis.

Обеспечение финансово-экономической устойчивости международных компаний представляет собой одну из ключевых проблем в современном мировом бизнесе. В условиях глобализации мировой

экономики и роста конкуренции на мировых рынках все более важным становится обеспечение устойчивого и надежного функционирования бизнеса на международном уровне.

Финансовая устойчивость определяется способностью компании успешно управлять своими финансовыми ресурсами, минимизировать риски и обеспечивать стабильный доход для всех заинтересованных сторон, включая акционеров, инвесторов, кредиторов, работников и клиентов [1].

Международные компании сталкиваются с рядом проблем, связанных с множеством факторов, негативно влияющих на их деятельность, к которым относятся валютные колебания, политическая нестабильность, различия в правовых системах и национальных законодательствах, а также изменения в мировой экономике и торговле.

Указанные факторы создают сложную среду, требующую от международных компаний гибкости, адаптивности и стратегического управления рисками для обеспечения их долгосрочной устойчивости.

Финансово-экономическая устойчивость международных компаний имеет существенное значение не только для самих компаний, но и для мировой экономики в целом. Успешное функционирование международных компаний способствует экономическому росту, созданию рабочих мест, инновациям и развитию торговли между международными партнерами.

Неустойчивость или кризис в деятельности таких компаний может иметь серьезные последствия, включая финансовые потери, увольнения, а также дестабилизацию финансовых рынков и мировой экономики.

В данном контексте изучение и анализ факторов, влияющих на финансово-экономическую устойчивость международных компаний, представляет собой важное направление исследований как для академического сообщества, так и для практиков в области корпоративного управления, финансов и стратегического менеджмента [2].

Ключевыми аспектами при этом являются: анализ финансовой структуры компаний, оценка и управление финансовыми рисками; разработка эффективных стратегий управления, направленных на обеспечение устойчивости и роста международных компаний в условиях современной глобальной экономики.

Финансово-экономическая устойчивость международных компаний представляет собой важный аспект их долгосрочной успешной деятельности, потому как она определяет способность компании справляться с различными экономическими и финансовыми вызовами, сохранять стабильность в условиях внешних воздействий и обеспечивать свою прибыльность в долгосрочной перспективе. Проявление этой устойчивости обусловлено рядом факторов и стратегий, которые компании могут использовать [3].

Одним из основных аспектов финансово-экономической устойчивости является эффективное финансовое планирование и управление.

Международные компании должны иметь четкое представление о своих финансовых потоках, рисках и возможностях. Они должны строить свою стратегию таким образом, чтобы минимизировать финансовые риски и максимизировать прибыльные возможности, что безусловно подразумевает разработку гибких бюджетов, адекватное управление долгами и капиталом, а также эффективное управление оборотным капиталом.

Еще одним важным аспектом является диверсификация бизнеса и рыночных рисков. Международные компании, особенно те, которые работают в нескольких странах, должны распределять свои активы и инвестиции таким образом, чтобы снизить зависимость от одного рынка или отрасли. Это помогает им смягчать воздействие изменений в макроэкономической среде или региональных кризисов на свою прибыльность и стабильность.

Важно иметь эффективную систему контроля и управления рисками, что подразумевает анализ и оценку различных видов рисков, таких как финансовые, операционные, рыночные и репутационные. Международные компании должны разрабатывать стратегии по управлению этими рисками и принимать меры по их снижению или перераспределению [4].

Также важным аспектом является поддержание хороших финансовых показателей и ликвидности. Международные компании должны следить за своей финансовой устойчивостью, включая такие показатели, как общая задолженность, покрытие процентов, коэффициент текущей ликвидности и др. Все это помогает компаниям оперативно реагировать на изменения на рынке и избегать финансовых затруднений.

Помимо этого, международные компании должны уделять серьезное внимание своим отношениям с заинтересованными сторонами, такими как акционеры, инвесторы, клиенты, поставщики и государственные органы. Поддержание хороших отношений с этими сторонами способствует укреплению доверия к компании и обеспечивает ее финансовую стабильность в долгосрочной перспективе [5].

И конечно, важно иметь обоснованную эффективную стратегию управления кризисными ситуациями. Международные компании должны быть готовы к возможным экономическим и финансовым кризисам и иметь план действий для их преодоления, что подразумевает резервирование достаточных финансовых ресурсов, разработку альтернативных стратегий и сценариев развития событий, а также управление репутационными рисками в периоды нестабильности.

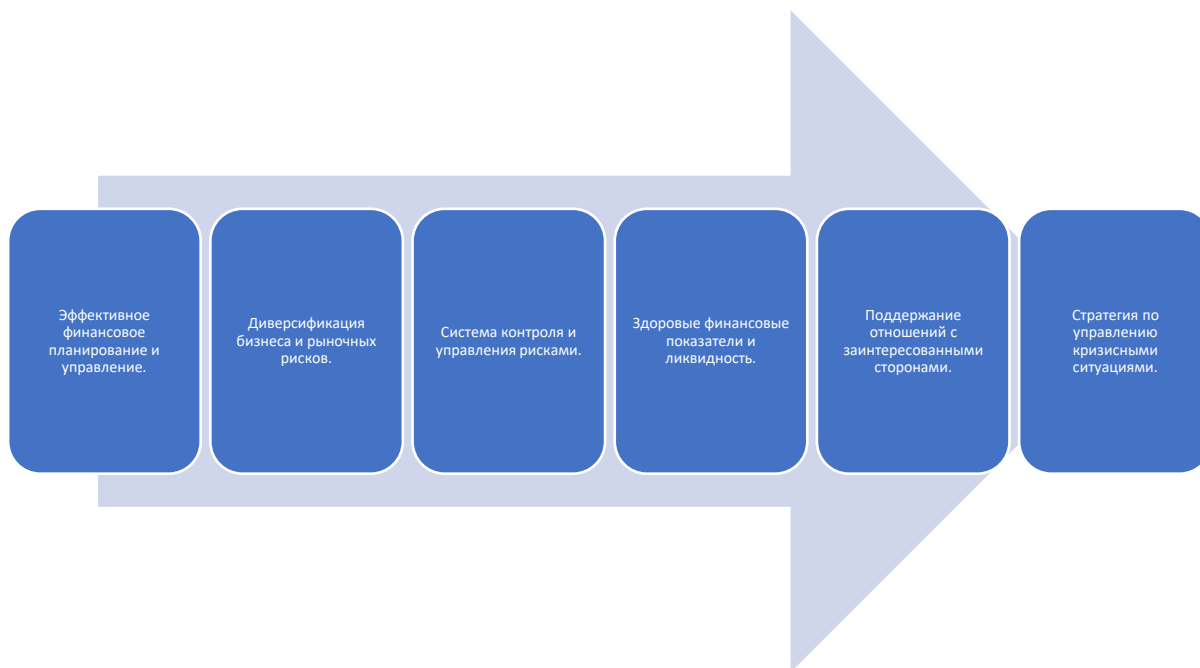


Рисунок 1. Признаки финансовой устойчивости международной компании

В заключении можно подчеркнуть, что финансово-экономическая устойчивость международных компаний является ключевым условием их успешного функционирования в условиях современной мировой экономики. Она обуславливается рядом факторов, включая эффективное финансовое планирование, диверсификацию бизнеса, управление рисками, поддержание здоровых финансовых показателей и развитие отношений с заинтересованными сторонами.

Финансово-экономическая устойчивость позволяет компаниям преодолевать экономические трудности, минимизировать риски и обеспечивать свою долгосрочную прибыльность. Это требует постоянного внимания к изменениям на рынке, гибкости в принятии решений и эффективного управления ресурсами. Имея прочную финансовую базу и адаптивные стратегии, международные компании могут успешно справляться с вызовами и оставаться конкурентоспособными на мировом рынке.

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Чжан Ли
студент магистратуры
Московский государственный педагогический университет

ОЦЕНКА ЭФФЕКТИВНОСТИ СТРАТЕГИЙ РАЗВИТИЯ МЕЖДУНАРОДНОЙ КОМПАНИИ

Аннотация. В данной статье рассматривается важность оценки эффективности стратегий развития для международных компаний в современном бизнес-мире. Обсуждаются ключевые этапы оценки, включая анализ внешней и внутренней среды, конкурентную среду, выбор стратегий развития и мониторинг их эффективности. Подчеркивается необходимость постоянного анализа и корректировки стратегий для достижения устойчивого роста и конкурентного преимущества.

Ключевые слова: стратегия развития, международные компании, оценка эффективности, внешняя среда, внутренняя среда, конкурентная среда, мониторинг, адаптация.

Zhang Li
graduate student
Moscow State Pedagogical University

ASSESSMENT OF THE EFFECTIVENESS OF DEVELOPMENT STRATEGIES OF AN INTERNATIONAL COMPANY

Abstract. This article discusses the importance of evaluating the effectiveness of development strategies for international companies in the modern business world. Key stages of evaluation are discussed, including analysis of the external and internal environment, competitive environment, selection of development strategies, and monitoring their effectiveness. Emphasis is placed on the need for ongoing analysis and adjustment of strategies to achieve sustainable growth and competitive advantage.

Keywords: development strategy, international companies, effectiveness assessment, external environment, internal environment, competitive environment, monitoring, adaptation.

В современном динамичном мире, где глобализация и технологические инновации меняют ландшафт бизнеса, стратегии развития для международных компаний становятся ключевым элементом успеха. Оценка эффективности таких стратегий является необходимым этапом в их разработке, реализации и корректировке.

Международные компании оперируют в разнообразных средах, которые включают в себя экономические, политические, социальные, и культурные факторы.

Данные компании сталкиваются с серьезными вызовами, такими как различия в законодательстве, налоговой политике, тарифах, и культурных нюансах. Поэтому разработка стратегий развития должна учитывать многообразие факторов, влияющих на успешную деятельность в разных странах [1].

Оценка эффективности стратегий развития международных компаний начинается с анализа внешней среды. Это включает в себя изучение мировых экономических тенденций, политических изменений, социокультурных особенностей и технологических инноваций. Понимание этих факторов позволяет компаниям адаптировать свои стратегии к изменяющимся условиям и извлечь выгоду из новых возможностей.

Далее следует анализ внутренних ресурсов и компетенций компании. Это включает оценку её финансового положения, технологических возможностей, кадрового потенциала и управленческого опыта. Эффективные стратегии развития должны строиться на уникальных сильных сторонах компании и компенсировать её слабые стороны. Оценка конкурентной среды также является важным аспектом. Это позволяет выявить конкурентные преимущества конкурентов, анализировать их стратегии и действия, и определить возможности для дифференциации и конкурентных атак [2].

Следующим этапом является выбор подходящих стратегий развития. Это может быть экспансия на новые рынки, диверсификация продуктов и услуг, стратегические партнерства, слияния и поглощения, или инновационные подходы к бизнесу. Каждая стратегия имеет свои преимущества и риски, и выбор оптимальной зависит от целей компании, её ресурсов и возможностей.

После реализации стратегий необходимо систематически оценивать их эффективность, что подразумевает мониторинг финансовых показателей, анализ рыночной доли, удовлетворенности клиентов, и других ключевых метрик. Только путем постоянного анализа и корректировки стратегий компании смогут добиться устойчивого роста и конкурентного преимущества на мировом рынке [3].

Оценка эффективности стратегий развития международной компании осуществляется с использованием различных финансовых и нефинансовых показателей. Вот несколько ключевых аспектов, которые могут включать в себя формулы и методы оценки:

- Прибыль – эффективность стратегий развития может измеряться по увеличению чистой прибыли. Формула: $НЧП = ВП - ЗП - \text{Налоги}$,

- где НЧП – чистая прибыль, ВП – выручка от продаж, ЗП - затраты на производство, налоги - налоговые выплаты.

- Рентабельность активов (ROA) – показывает, какую прибыль генерируют активы компании. Формула: $ROA = (\text{Чистая прибыль} / \text{Общие активы}) * 100\%$.

- Рентабельность собственного капитала (ROE) - измеряет прибыль, полученную компанией от использования ее собственного капитала. Формула: $ROE = (\text{Чистая прибыль} / \text{Собственный капитал}) * 100\%$.

- Денежный поток (Cash Flow) - оценивает денежные поступления и оттоки из операционной, инвестиционной и финансовой деятельности компании.

- Рыночная доля – измеряет долю компании на рынке относительно конкурентов.

- Уровень удовлетворенности клиентов - оценивается через опросы, рейтинги обслуживания, повторные покупки и т. д.

- Инновационная активность - оценивается через количество и качество новых продуктов или услуг, патенты, инвестиции в исследования и разработки.

- Эффективность производства: может быть оценена через показатели производственной эффективности, например, снижение брака, увеличение производительности труда и т. д.

- Стоимость привлечения клиента (CAC) – считается как отношение затрат на маркетинг и продвижение к количеству новых клиентов. Формула: $CAC = (\text{Затраты на маркетинг и продвижение} / \text{Количество новых клиентов})$.

- Показатель Чистой добавленной стоимости (Net Promoter Score, NPS) - определяет уровень удовлетворенности клиентов и вероятность рекомендации продукции другим.

При оценке эффективности стратегий развития международной компании важно учитывать, как финансовые, так и нефинансовые показатели, чтобы иметь полное представление об успехе или неуспехе принятых стратегий [4].

Оценка эффективности стратегий развития международной компании является ключевым элементом управления бизнесом и принятия решений. Для этого применяются разнообразные финансовые и нефинансовые показатели, предоставляющие полное представление о достижении поставленных целей и успешности выбранных стратегий.

Начнем с финансовых показателей. Прибыль является одним из наиболее важных показателей, который измеряет финансовый результат деятельности компании. Чистая прибыль, вычисляемая как выручка от продаж минус затраты на производство и налоги, позволяет оценить эффективность использования ресурсов и эффективность стратегий развития.

Далее, рентабельность активов (ROA) и рентабельность собственного капитала (ROE) предоставляют информацию о том, как компания использует свои активы и собственный капитал для генерации прибыли. ROA показывает, какую прибыль генерируют все активы компании, в то время как ROE фокусируется на прибыли, полученной от использования собственных средств акционеров.

Эти показатели помогают определить эффективность управления капиталом и привлечением инвестиций.

Денежный поток (Cash Flow) является ключевым показателем, который оценивает денежные поступления и оттоки из операционной, инвестиционной и финансовой деятельности компании. Он отражает финансовую устойчивость и способность компании к погашению долгов, инвестированию в развитие и выплате дивидендов [5].

Перейдем к нефинансовым показателям. Рыночная доля и уровень удовлетворенности клиентов являются ключевыми для понимания позиции компании на рынке и ее конкурентоспособности. Рыночная доля отражает долю компании на рынке по сравнению с ее конкурентами, тогда как уровень удовлетворенности клиентов позволяет понять, насколько успешно компания удовлетворяет потребности своих клиентов и поддерживает их лояльность.

Инновационная активность оценивается через количество и качество новых продуктов или услуг, патенты, инвестиции в исследования и разработки. Этот показатель отражает способность компании к инновациям и адаптации к изменяющимся рыночным условиям.

Эффективность производства также играет важную роль. Она может быть оценена через показатели производственной эффективности, такие как снижение брака, увеличение производительности труда и другие. Эти показатели свидетельствуют о том, насколько успешно компания управляет производственными процессами и ресурсами.

Наконец, комбинированные показатели, такие как стоимость привлечения клиента (CAC) и показатель Чистой добавленной стоимости (NPS), предоставляют комплексную информацию о воздействии стратегий развития на клиентскую базу и уровень их удовлетворенности. CAC отражает эффективность маркетинговых инвестиций, а NPS измеряет уровень лояльности клиентов и вероятность их рекомендации продукции другим.

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Чжан Ли
студент магистратуры
Московский государственный педагогический университет

СТРАТЕГИИ РАЗВИТИЯ МЕЖДУНАРОДНОЙ КОМПАНИИ

Аннотация. Статья рассматривает значимость разработки эффективных стратегий развития для международных компаний в условиях современного мирового рынка. Авторы обсуждают влияние факторов, таких как глобализация, инновации, изменения потребительских предпочтений и политические сдвиги, на стратегическое развитие бизнеса. Особое внимание уделяется балансированию между стабильностью и инновациями, а также выбору и реализации подходящих стратегических подходов в зависимости от целей и условий компании.

Ключевые слова: стратегии развития, международные компании, конкурентоспособность, глобализация, инновации.

Zhang Li
graduate student
Moscow State Pedagogical University

DEVELOPMENT STRATEGIES FOR AN INTERNATIONAL COMPANY

Abstract. The article explores the significance of developing effective development strategies for international companies in the context of the modern global market. The authors discuss the impact of factors such as globalization, innovation, changes in consumer preferences, and political shifts on business strategic development. Special attention is paid to balancing stability and innovation, as well as choosing and implementing appropriate strategic approaches depending on the company's goals and conditions.

Keywords: development strategies, international companies, competitiveness, globalization, innovation.

В условиях современного высококонкурентного и динамичного мирового рынка, разработка эффективных стратегий развития международных компаний становится необходимостью, определяющей их конкурентоспособность и устойчивость.

В силу множества факторов, в том числе глобализации экономики и интернационализации бизнеса, научно-технические инноваций, изменения потребительских предпочтений, законодательных и нормативных актов, международные компании вынуждены постоянно адаптироваться к новым рыночным условиям.

В этом контексте разработка и реализация стратегий развития, ориентированных на укрепление позиций на мировом рынке, становится ключевым аспектом успешного функционирования любой международной компании.

Стратегии развития международных компаний охватывают широкий спектр вопросов, начиная от выбора рынков для экспансии и определения целевой аудитории, и заканчивая оптимизацией процессов производства, логистики и маркетинга. Ключевым вопросом при разработке таких стратегий безусловно является балансирование между стабильностью и инновациями, между сохранением устоявшихся практик и стремлением к поиску новых возможностей.

Подходы к стратегическому развитию также зависят от масштаба и специфики бизнеса компании, её отраслевой направленности, конкурентной среды и других факторов [1].

В настоящей статье рассматриваются различные стратегии развития международных компаний, анализируются их особенности, преимущества и недостатки, а также предлагаются практические рекомендации по выбору и реализации наиболее подходящих стратегических подходов в зависимости от конкретных условий и целей компании.

Данные рекомендации представляют полезный инструментарий для успешного управления и развития международной компании в динамичной и конкурентной мировой экономической среде.

Стратегии развития международной компании могут варьироваться в зависимости от её целей, отрасли, конкурентной среды и других факторов. В таблице 1 представлены некоторые из наиболее распространённых стратегий развития [2].

№	Вид стратегии	Характеристика стратегии
1	Экспортная стратегия	Фокусируется на продаже продукции или услуг за пределами страны происхождения компании. Чаще всего используется в начальном этапе.
2	Стратегия лицензирования	Компания предоставляет лицензии на свои продукты технологии другим компаниям в других странах в обмен на плату или роялти.
3	Стратегия франчайзинга	Основывается на предоставлении права на использование бренда и бизнес-модели другим компаниям (франчайзи) за плату и соблюдение стандартов.
4	Стратегия совместного предприятия	Компания вступает в партнерство с местной компанией для совместного ведения бизнеса на международных рынках.
5	Стратегия инвестиций	Компания создает свои собственные филиалы или дочерние компании в других странах для производства или предоставления услуг.
6	Стратегия адаптации	Компания изменяет свои продукты, услуги или бизнес-модель, чтобы адаптироваться к различиям в культуре, потребностях и законодательстве разных стран.
7	Глобализационная стратегия	Компания стремится к стандартизации продуктов, маркетинга и операций во всех странах, где она присутствует, чтобы достичь масштабных экономических выгод.

Таблица 1. Стратегии развития международных компаний

Каждая из этих стратегий имеет свои преимущества и недостатки, и выбор конкретной стратегии зависит от целей компании, её ресурсов, конкурентной среды и других факторов. Важно, чтобы стратегия развития была адаптирована к конкретным условиям и была направлена на устойчивый и долгосрочный рост компании на мировом рынке.

Стратегия глобализации представляет собой стратегическое направление, ориентированное на максимальное расширение бизнеса компании за пределы национальных границ. В основе этой стратегии лежит стремление стать мировым игроком, что достигается путем открытия филиалов в различных странах.

Одним из ключевых аспектов глобализации является стандартизация продуктов и услуг компании для их адаптации к международным рынкам, что позволяет упростить процессы производства, снизить издержки и повысить эффективность деятельности компании на глобальном уровне.

Ряд компаний предпочитают применять стратегию локализации. В отличие от глобализации, локализация фокусируется на адаптации продуктов и услуг под местные потребности и предпочтения, когда компания создает специализированные продукты или услуги для различных рынков, учитывая культурные, языковые и законодательные особенности

каждой страны. Такой подход позволяет компании лучше взаимодействовать с местными потребителями и устанавливать более прочные связи с ними [3].

Стратегия мультидоместического подхода сочетает в себе элементы как глобализации, так и локализации. Компания формирует централизованное управление, чтобы обеспечить стандартизацию и эффективность, но при этом децентрализует операции для учета местных особенностей. Такой подход позволяет компании сохранить баланс между стандартизацией и адаптацией, что способствует успешной деятельности на различных рынках.

Стратегия франчайзинга представляет собой модель бизнеса, при которой компания предоставляет право на использование своего бренда, продуктов и бизнес-модели другим компаниям (франчайзи). Это позволяет быстро расширяться без значительных капиталовложений, поскольку франчайзи берут на себя ответственность за развитие бизнеса на местах.

Для успешной реализации этой стратегии необходим строгий контроль качества и бренда со стороны компании-франчайзора.

Стратегия слияний и поглощений (M&A) предполагает приобретение или слияние компании с другими организациями с целью увеличения доли на рынке, расширения географического присутствия, получения доступа к новым технологиям или уменьшения конкуренции. Эта стратегия может быть эффективным способом для компании ускорить свой рост и увеличить конкурентоспособность.

Стратегия альянсов и партнерств позволяет компаниям объединять усилия для достижения общих целей. Вместо того, чтобы владеть активами или приобретать компании, международная компания может заключать стратегические партнерства с другими организациями, что может быть совместное производство, совместная дистрибуция или совместные исследования и разработки.

Стратегия диверсификации предполагает развитие деятельности в новых отраслях или на новых рынках с целью уменьшения рисков, связанных с концентрацией в одной области. Вертикальная диверсификация предполагает расширение в другие звенья цепочки производства, а горизонтальная диверсификация – в различные бизнес-сегменты, что подразумевает инвестиции в исследования и разработки, патентование новых технологий или приобретение стартапов с инновационными решениями. В итоге, выбор стратегии зависит от множества факторов, включая цели компании, её ресурсы, особенности рынка и конкурентное окружение. Эффективное использование стратегии может помочь компании успешно оперировать на мировом рынке и достигать своих бизнес-целей [4].

В ходе данного исследования были рассмотрены различные аспекты стратегического развития, выявлены основные факторы, определяющие успех в международном бизнесе, и предложены рекомендации для

эффективного управления компанией на глобальном рынке.

Во-первых, было показано, что успешные международные компании строят свою деятельность на основе глубокого понимания местных культур, традиций и потребностей рынка. Адаптация к различным культурным контекстам требует гибкости и способности к быстрым изменениям. В этом контексте важно разработать стратегию, которая учитывает культурные особенности каждого рынка, на котором компания присутствует.

Во-вторых, успешные международные компании активно используют технологические инновации для оптимизации своих процессов и повышения эффективности. Благодаря применению современных информационных технологий и аналитических инструментов компании могут быстро реагировать на изменения внешней среды и принимать обоснованные стратегические решения.

Третьим важным аспектом является управление человеческими ресурсами. Международные компании, стремящиеся к успеху, инвестируют в развитие своих сотрудников, создают условия для роста и профессионального развития персонала. Эффективное управление человеческими ресурсами позволяет компаниям привлекать талантливых специалистов и создавать команду, способную реализовывать стратегические цели.

Глобальная деятельность компании связана с рядом рисков, среди которых политическая нестабильность, валютные колебания, изменения законодательства и многие другие, именно поэтому компании необходимо иметь четко определенную стратегию управления рисками, которая позволяет минимизировать потенциальные угрозы и обеспечивать устойчивость бизнеса в условиях неопределенности [5].

Важным условием успешной деятельности международной компании является построение долгосрочных взаимовыгодных партнерских отношений с клиентами, поставщиками, посредниками, партнерами по бизнесу и другими заинтересованными сторонами. Установление эффективных партнерских отношений способствует созданию стабильной клиентской базы и обеспечивает долгосрочную устойчивость бизнеса.

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Чжан Ли
студент магистратуры
Московский государственный педагогический университет

ОРГАНИЗАЦИОННО-ЭКОНОМИЧЕСКИЕ ПРОБЛЕМЫ СТРАТЕГИЧЕСКОГО УПРАВЛЕНИЯ МЕЖДУНАРОДНОЙ КОМПАНИЕЙ

Аннотация. Данная статья посвящена исследованию организационно-экономических проблем стратегического управления, которые влияют на эффективность деятельности современных организаций. В статье рассматриваются основные причины возникновения таких проблем, их влияние на процесс принятия стратегических решений, а также предлагаются практические рекомендации по их решению.

Ключевые слова: стратегическое управление, организационные проблемы, экономические проблемы, принятие решений, эффективность.

Zhang Li
graduate student
Moscow State Pedagogical University

ORGANIZATIONAL AND ECONOMIC PROBLEMS OF STRATEGIC MANAGEMENT OF AN INTERNATIONAL COMPANY

Abstract. This article examines the organizational and economic problems of strategic management that affect the efficiency of modern organizations. The article discusses the main causes of such problems, their impact on the process of making strategic decisions, and provides practical recommendations for their solution.

Keywords: strategic management, organizational problems, economic problems, decision-making, efficiency.

В современном мире стратегическое управление стало одним из ключевых элементов успеха деятельности организации любой организационно-правовой формы и формы собственности, будь то производственная корпорация, государственное учреждение или некоммерческая организация.

Основываясь на комплексном анализе внешних и внутренних факторов, стратегическое управление направлено на определение целей и разработку планов действий для достижения этих целей в долгосрочной перспективе.

Вместе с тем, на пути к успешному стратегическому управлению международные компании сталкиваются с рядом организационно-

экономических проблем, требующих серьезного внимания и анализа. Эти проблемы могут быть связаны с отсутствием обоснованных целей и стратегий, неэффективным распределением ресурсов, недостаточной адаптивностью к изменяющимся условиям рынка, а также с недостаточным вовлечением работников в процесс принятия решений и реализации стратегий [1].

Организационные проблемы стратегического управления часто имеют корни как внутри, так и вне самой организации. Внутренние факторы, такие как неэффективная система управления, конфликты между различными подразделениями, или недостаточное использование инноваций и технологий, могут затруднять успешную реализацию стратегий. С другой стороны, внешние факторы, такие как экономическая нестабильность, изменения законодательства или конкурентное давление, могут также оказывать существенное влияние на способность организации к эффективному стратегическому управлению. Понимание и решение этих организационно-экономических проблем является ключевым аспектом для успешного достижения поставленных целей и обеспечения конкурентоспособности организации на международных рынках [2].

№	Наименование проблемы	Характеристика проблемы
1	Недостаточное исследование рынка	Компания может столкнуться с проблемой недостаточного изучения рынка перед принятием стратегических решений. Неправильное понимание рыночных трендов может привести к неудачным стратегиям.
2	Отсутствие ресурсов	Недостаточные финансовые, человеческие или материальные ресурсы могут ограничить способность компании к реализации выбранной стратегии развития.
3	Неэффективное управление	Слабое управление компанией может привести к неправильному выделению ресурсов, неэффективному принятию решений и низкой реализации стратегии.
4	Изменяющаяся конкурентная среда	Рыночная конкуренция и технологические изменения могут привести к необходимости постоянного пересмотра и адаптации стратегии развития компании.
5	Отсутствие инноваций	Недостаток инноваций может привести к потере конкурентоспособности компании на рынке.
6	Неудачи в партнерстве	Неудачные стратегические партнерства могут снизить эффективность стратегии развития компании или привести к утрате доверия со стороны партнеров.
7	Неправильное маркетинговое позиционирование	Неправильное позиционирование продуктов или услуг на рынке может снизить спрос на них и препятствовать реализации стратегии развития.

№	Наименование проблемы	Характеристика проблемы
8	Недостаточная адаптация к изменениям	Компания может столкнуться с проблемой недостаточной способности адаптироваться к изменениям внешней среды, что может привести к неудаче стратегии развития.

Таблица 1. Проблемы в стратегии развития компаний

Неоднозначность целей и приоритетов является одной из ключевых проблем, с которой сталкиваются компании при определении своих стратегических направлений. Отсутствие четких и однозначных целей затрудняет разработку эффективной стратегии, способной сбалансировать краткосрочные и долгосрочные цели. Компании могут теряться во множестве возможных путей и направлений, что приводит к потере времени, ресурсов и потенциальных возможностей для развития.

Неэффективное выделение ресурсов является еще одной серьезной проблемой. Нерациональное распределение финансовых и других ресурсов может привести к недофинансированию важных стратегических проектов, которые могут определить успех компании в будущем.

Также нужно отметить, что излишнее финансирование непродуктивных инициатив может привести к расточительству и потере конкурентоспособности.

Недостаточное вовлечение персонала также становится серьезным препятствием для успешной реализации стратегии. Полное понимание и поддержка со стороны персонала необходимы для выполнения стратегических задач. Однако часто бывает, что стратегия остается неясной для сотрудников, или же они не видят своего места и роли в ее реализации, что довольно часто приводит к дезинформации, недовольству и даже саботажу со стороны персонала.

Отсутствие адаптивности также является значительным фактором, препятствующим успешному стратегическому управлению. Стратегии, которые не могут быстро реагировать на изменения в рыночной среде или внешние вызовы, могут оказаться неэффективными и устаревшими [3].

Гибкость и способность к адаптации к новым условиям играют решающую роль в успешном выживании и процветании компании.

Недостаточная оценка рисков также может серьезно подорвать стратегическое управление компанией. Стратегические решения всегда связаны с определенными рисками, и недооценка этих рисков может привести к неудачам и потерям. Важно сформировать систему идентификации и оценки рисков, которая позволяет выявлять и управлять ими на всех этапах стратегического процесса.

Отсутствие инновационной активности также является серьезным вызовом для компаний в современном мире. Быстрое технологическое развитие и изменения в потребительском поведении требуют постоянного инновационного подхода. Компании, не инвестирующие в исследования и разработки новых продуктов и услуг, могут потерять свою конкурентоспособность и рыночные позиции.

Серьезным препятствием в формировании и реализации успешной стратегии могут явиться проблемы в корпоративной культуре. Если ценности и принципы компании не соответствуют ее стратегическим целям, это может привести к конфликтам и срыву стратегических инициатив. Отсутствие поддержки и понимания со стороны работников может препятствовать успешной реализации стратегии, даже если она кажется обоснованной и эффективной [4].

В современном бизнесе конкурентная среда постоянно меняется, требуя от компаний гибкости и адаптивности. Однако, часто компании сталкиваются с проблемами в своем стратегическом управлении, которые могут привести к потере конкурентоспособности и даже к финансовым потерям.

Для успешного решения этих проблем необходимо разработать комплекс мер, представленных на рисунке 1.



Рисунок 1. Мероприятия по решению проблем стратегического управления международной компанией

Комплексный подход к решению проблем, связанных с стратегическим управлением, позволяет компаниям эффективно адаптироваться к изменяющимся условиям рынка и достигать стратегических целей. Однако, для успешной реализации этого подхода

необходимо не только определить правильную стратегию, но и осуществить системные изменения внутри компании [5].

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*Чжан Цюянь
студент магистратуры
ФГБОУ ВО «Московский педагогический
государственный университет»
Россия, г.Москва*

*Научный руководитель: Адельфинский А.О., д-р экономич. наук
доцент*

ПЕРСПЕКТИВЫ СОТРУДНИЧЕСТВА РОССИИ И КИТАЯ В ФАРМАЦЕВТИКЕ НА ПРИМЕРЕ АНАЛИЗА ДЕЯТЕЛЬНОСТИ YUNNAN BAIYAO GROUP

Аннотация. в данной статье анализируется развитие российско-китайского взаимодействия в области фармацевтики. По мнению автора, оно будет расширяться, так как после 2022 года на российском рынке прекратили работу многие иностранные западные фармацевтические компании. В связи с этим усложнилась логистика ввоза европейских и американских лекарств из-за реализации так называемого «параллельного импорта», таким образом возрастает риск дефицита жизненно важных препаратов, медицинского оборудования, а также сырья для производства медикаментов. В рамках данной статьи проводится анализ собранного массива информации о показателях китайской фармацевтической компании Yunnan Baiyao Group, и возможности расширения ее международного участия, в том числе развитие бизнеса в России.

Ключевые слова: Китай, фармакология, Yunnan Baiyao, санкции, стратегический менеджмент, импортозамещение, народная медицина.

*Chzhan Cyuyan'
master student
Moscow State Pedagogical University
Russia, Moscow*

*Scientific supervisor: Adel'finskij A.O., doctor of economics
docent*

COOPERATION PROSPECTS BETWEEN RUSSIA AND CHINA IN PHARMACEUTICALS BASED ON THE ANALYSIS OF THE YUNNAN BAIYAO GROUP

Annotation: this article analyzes the development of Russian-Chinese cooperation in the field of pharmaceuticals. According to the author, it will expand, since after 2022 many foreign Western pharmaceutical companies stopped working on the Russian market. In this regard, the logistics of importing

European and American medicines has become more complicated due to the implementation of the so-called "parallel imports", thus increasing the risk of shortages of vital drugs, medical equipment, as well as raw materials for the production of medicines. This article analyzes the collected array of information on the performance of the Chinese pharmaceutical company Yunnan Baiyao Group, and the possibility of expanding its international participation, including business development in Russia.

Key words: China, pharmacology, Yunnan Baiyao, sanctions, strategic management, import substitution, traditional medicine.

Из-за высокой инфляции и роста цен на западную продукцию, в том числе лекарственные препараты, в настоящее время, наблюдается переход россиян на более экономную модель поведения. Это толкает потребителей покупать дженерики вместо оригинальных медикаментов и искать более дешевые аналоги известных и популярных лекарств.

Как и во всей промышленности Российской Федерации, в фармацевтике также реализуются направления развития импортозамещения, в том числе производство с нуля собственных препаратов из собственного же сырья. Также будет реализовываться постепенный переход с параллельного импорта на официальные поставки от зарубежных компаний, которые не вошли в санкционный список, например, фармацевтические фирмы из Китая и Индии [1].

Но насколько оправдано сотрудничество со странами Азии в целом и с Китаем в частности в области фармакологии? На этот вопрос может ответить анализ общего производства медикаментов в странах мира.

Сейчас по выпуску фармацевтики фиксируются сразу 3 региона-лидера: Азия, Европа и Северная Америка. В 2019 г. их суммарная доля составляет 97% выпуска продукции отрасли (как и в 2003 г.). Однако существенно изменился процент Азиатского региона в мировом производстве фармацевтической продукции (рост с 20 до 36%). Доля Северной Америки снизилась за анализируемый период с 37 до 29%, а Европейского региона – с 40 до 32% (Рис. 1).

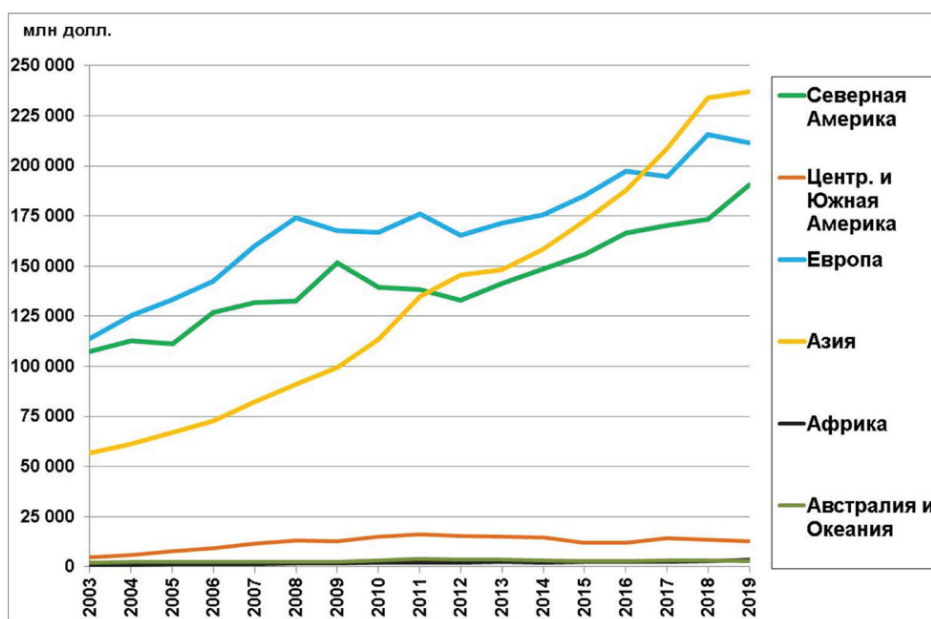


Рис. 1. Динамика выпуска продукции фармацевтической индустрии в регионах мира, млн долл.

На 10 стран-лидеров приходится 77% выпуска мировой фармацевтической продукции, а на США и Китай – 52% [3] (рис. 2).

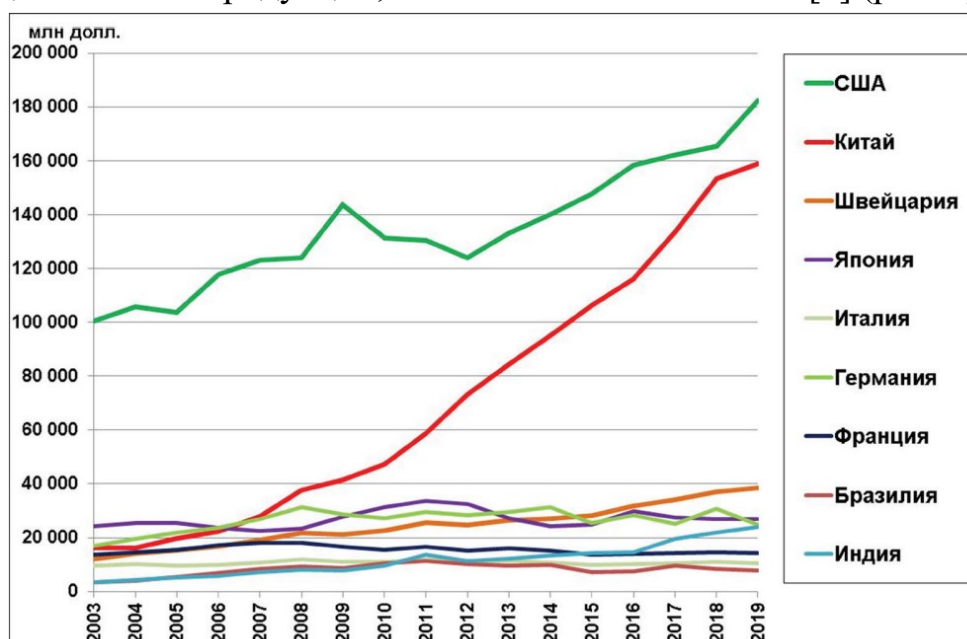


Рис. 2. Динамика выпуска продукции фармацевтической индустрии в странах-лидерах, млн долл.

Отмечу, что объём производства лекарственных средств в Китае увеличился за рассматриваемый период практически в 10 раз – с 16 до 159 млрд долл. (рис. 3). Для сравнения: выпуск продукции в США вырос лишь в 1,8 раза, в Германии – в 1,5 раза, в Швейцарии – в 3 раза, в Великобритании – в 1,2 раза. [3].

Получается, сотрудничество с Китаем как с одним из лидеров медицинской промышленности является весьма перспективным. Здесь можно также отметить давнюю традицию и историю медицины в Китае, насчитывающую тысячелетия. Но именно в последние 20-30 лет Китай показывает пример создания современной фармацевтической промышленности. Да, она пока слабо инновационная, и в настоящее время специализируется на выпуске дженериков и сырья, требует развития также и индустрия выпуска медицинской техники и приборов. Однако уже сейчас китайские препараты выпускаются в огромных объемах, и вполне способны соревноваться в качестве с американскими и европейскими лекарствами. Но Китай в значительной степени остается страной исторического наследия, поэтому наряду с наличием серьезной научной составляющей, растёт роль препаратов традиционной китайской медицины. В качестве примера симбиоза многовекового опыта и современных технологий можно рассмотреть одного из крупных игроков на рынке фармацевтики Китая - Yunnan Baiyao Group.

Корпорация Yunnan Baiyao Group берет свое название от традиционного китайского целебного средства, которое пользуется популярностью уже более 100 лет. Лекарство было разработано Цюй Хуанчжаном из уезда Цзянчуань в провинции Юньнань в 1902 году. Продукт Yunnan Baiyao производится и распространяется предприятием с государственно-частным партнерством, Yunnan Baiyao Group. Используется в качестве как кровоостанавливающего, так и кроворазжижающего средства как в традиционной медицине для лечения людей, так и в ветеринарии.

Стоит отметить, что несмотря на то, что препарат Yunnan Baiyao давно признан в Китае, американские, австралийские и европейские регуляторы не спешат классифицировать его как лекарственное средство из-за ограниченных научных данных относительно его эффективности в профилактике и лечении патологических состояний как у людей, так и у животных при пероральном введении.

В 1993 году Yunnan Baiyao Group Co., Ltd прошла процедуру листинга на Шэньчжэньской фондовой бирже и стала первой компанией в провинции Юньнань, акции которой были зарегистрированы. Позже в 1999 году группа скорректировала свою модель бизнеса, чтобы построить инфраструктуру, которая лучше поддерживает его устойчивость. Не ограничиваясь простым производством средств традиционной медицины по основному направлению, фирма расширяет свою линейку продуктов, чтобы стать ведущей в индустрии здравоохранения.

По состоянию на 31 декабря 2016 года у компании было 12 дочерних компаний, занятых в фармацевтической промышленности, и четыре основных подразделения, занимающихся ценными бумагами, инвестициями и биотехнологическими исследованиями [4].

На конец 2021 года рыночная стоимость группы составляла 134,2 млрд юаней. А ее общие активы за период 2018-2022 гг. года выросли с 30,38 млн юаней до 55,29 млн юаней [5].

Во время пандемии коронавируса, стоимость акций компании выросла, так как многие китайцы для укрепления иммунитета и лечения легких форм Covid-19 предпочитали наряду с препаратами доказательной медицины, пользоваться традиционными китайскими средствами (рис. 3).



Рис. 3. Стоимость акций Yunnan Baiyao Group Co., Ltd, в период 2017-2022 гг.

Компания в основном занимается производством и продажей товаров, связанных со здоровьем, включая лекарства, медицинское оборудование, сырье для медицинских целей, чай и товары медицинского назначения. У нее есть 4 основных бизнес-подразделения:

- доказательная и клиническая медицина,
- товары для здоровья и медтехника,
- травы и традиционные препараты
- финансово-коммерческое подразделение.

В настоящее время медицина в Китае активно развивается, логистика фармакологических препаратов расширяется, а сфера бизнеса является весьма перспективной. На следующей стадии развития Yunnan Baiyao Group можно охватить не только область фармакологии, но и производство сложных медицинских устройств, так как на данный момент, это фирма – самое крупное промышленное и коммерческое фармацевтическое предприятие в провинции Юньнань. Хотя доходы коммерческого подразделения Yunnan Baiyao Group сейчас сравнительно больше, чем у других подразделений, компания уделяет большое внимание товарам для здоровья и медтехники. Эти продукты стали заметным катализатором устойчивого роста. С 2012 по 2020 год, выручка этого подразделения выросла с 180 млн. юаней до 538,7 млн. юаней, что составляет 16% от общей выручки фирмы [5].

Что касается подразделения трав и традиционных препаратов, то, хотя его операционные доходы занимают лишь небольшую часть,

производственная линия имеет полный цикл, начиная от ферм лекарственных трав, производства препаратов, транспортировки, импорта и экспорта. Финансово-коммерческое подразделение приносит большую часть выручка каждый год. В 2021 году доля выручки подразделения коммерческого бизнеса составила 65%

Компания Yunnan Baiyao является международной, но так как основным потребителем ее товаров и услуг являются люди китайской культуры, то ее восприятие в других странах может быть затруднено. Но развитие фармацевтической промышленности в Китае и многочисленная зарубежная диаспора, которая становится потребителем продуктов традиционной медицины, становятся фактором вытягивания таких пока что локальных производителей как Yunnan Baiyao на международный рынок.

С другой стороны, стратегические изменения при выходе Yunnan Baiyao на рынок России должны касаться изменения текущей направленности на традиционную китайскую медицину. Данный путь можно сохранить, но основной фокус для успешного действия в России и выхода на более широкий рынок требуется направить на открытие производства традиционных лекарственных препаратов, дженериков, сырья и т.д. Также наиболее рациональным будет формирование исследовательских подразделений для изучения действия как китайских народных средств и традиционной медицины на различные группы населения Российской Федерации.

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*Чжан Цян
студент магистратуры
Московский педагогический государственный университет*

ИССЛЕДОВАНИЕ СТРАТЕГИЙ ОРГАНИЗАЦИОННОГО РАЗВИТИЯ МЕЖДУНАРОДНЫХ КОМПАНИЙ: АНАЛИЗ ОПЫТА КОМПАНИИ ALIBABA

Аннотация. В статье выявлены исследования стратегий организационного развития международных компаний и анализ опыта компании ALIBABA.

Ключевые слова: электронная коммерция, торговля, бизнес.

*Zhang Qiang
graduate student
Moscow Pedagogical State University*

STUDY OF ORGANIZATIONAL DEVELOPMENT STRATEGIES OF INTERNATIONAL COMPANIES: ANALYSIS OF ALIBABA'S COMPANY EXPERIENCE

Abstract. The article reveals the research of organizational development strategies of international companies and analysis of ALIBABA company experience.

Keywords: electronic, commerce, trade, business.

Организационное развитие – это важная часть успеха в современной быстроразвивающейся деловой среде, крайне важным это является для международных компаний. Стратегии данного развития рассматривают разнообразные подходы для повышения эффективности и подстраивание компаний под современные реалии. Здесь мы рассмотрим наиболее популярные виды стратегий:

1. Инновационная стратегия, в нее входят современные технологии и бизнес-процессы, и кроме того непрерывное обновление продуктов и услуг для поддержания конкурентоспособности.

2. Стратегия глобализации, направленная на расширение бизнеса за пределы национальных рынков и создание сети глобальных операций через экспорт, лицензирование, совместные предприятия или прямые иностранные инвестиции.

3. Стратегия интеграции, ориентированная на слияния и поглощения, которая позволяет компаниям быстро наращивать ресурсы, технологии и рыночную долю.

4. Стратегия развития человеческих ресурсов, заключающаяся в инвестициях в персонал компании через обучение, развитие навыков и создание мотивирующей корпоративной культуры.

5. Стратегия устойчивого развития, которая подразумевает интеграцию принципов социальной ответственности и экологичности в бизнес-операции и корпоративные ценности.

Компания Alibaba пользуется данными стратегиями чтобы поддерживать передовые позиции в мире в сфере электронной коммерции. Создав платформу, которая дает уникальные онлайн-решения для торговли и бизнеса, Alibaba Group реализовала инновационный подход, привлекающий и продавцов, и покупателей со всего мира. Стратегия глобализации Alibaba оказалась очень успешной посредством запуска местных платформ и предложений, подстроенных под специфику отдельных рынков и языковых групп. Стремясь к устойчивому развитию, Alibaba Group также инвестирует в экологические инициативы и развивает ответственные практики ведения бизнеса.

С конца 1990-х годов электронная коммерция в Китае продолжает быстро расти и в настоящее время является крупнейшим рынком электронной коммерции в мире. Однако по мере насыщения рынка темпы роста индустрии электронной коммерции начали замедляться. Сейчас в Китае наблюдается быстрый рост трансграничной электронной коммерции. Китай и ЕС имеют широкое пространство для развития трансграничной электронной коммерции, и рынок имеет значительный потенциал. В 2020 году на фоне эпидемии импортно-экспортная торговля между Китаем и ЕС увеличилась в два раза. 22,4 % всех товаров, импортируемых в ЕС, происходят из Китая (исключая Гонконг), в то время как 18,3 % стоимости товаров экспортируется за пределы ЕС. В нынешней международной ситуации выход Великобритании из ЕС (Brexit), распространение эпидемии, кризис беженцев и торговые трения между Европой и США нанесли тяжелый удар по вялой европейской экономике. В Китае, где эпидемия эффективно контролируется, темп экономической жизни уже вернулся к нормальному. Кроме того, по сравнению с традиционной практикой трансграничной торговли, электронная коммерция может принести пользу большему числу предприятий благодаря меньшему объему, большей гибкости и большей безопасности. В то же время, ряд инклюзивных политических мер Китая также создаст более открытую и свободную среду для предприятий электронной коммерции, чтобы "выйти за границу". Поэтому для китайских компаний трансграничной электронной коммерции сейчас самое время развивать свой бизнес в Европе. Однако проблема

заключается в том, что европейский рынок для китайских компаний - это неизведанный мир с рисками.

Есть много конкретных проблем, с которыми вам еще предстоит столкнуться, например, какова там ситуация, как они возникают, как они расширяются и каких рисков вам следует избегать. Alibaba Group company, крупнейшая китайская компания электронной коммерции, основала AliExpress в 2010 году и eWTP (всемирную платформу электронной коммерции) в 2016 году и открыла офисы во Франции, Германии, Нидерландах и Италии, которые являются самыми быстрыми китайскими компаниями, вышедшими на европейский рынок. Инициативы компании Alibaba по выходу на европейский рынок в качестве международной компании электронной коммерции являются инновационными и глубокими. Таким образом, компания Alibaba выбрана в этой статье в качестве основного примера для углубленного анализа и изучения своей стратегии развития в Европе. Учитывая вышеупомянутую цель, цель статьи - предоставить несколько разумных вариантов китайским компаниям электронной коммерции, которые выходят на европейский рынок, становятся транснациональными корпорациями и конкурируют за долю рынка в Европе. Для достижения этой цели было проведено три этапа. Первый этап был посвящен объяснению истории электронной коммерции и факторов, связанных с развитием ЕС, на основе изучения большого количества литературы и определения соответствующей методологии исследования и организационной структуры. Второй этап - анализ европейского рынка электронной коммерции с использованием модели PEST. Наконец, вам следует выяснить мотивацию выхода на европейский рынок и выбранные стратегии его сохранения, а также проанализировать их эффективность. Объектом исследования является компания Alibaba Group.

Компания Alibaba создала самую передовую платформу электронной коммерции и имеет полную систему обслуживания для предоставления услуг электронной коммерции своим клиентам. Продукты компании Alibaba Virtual Body обладают следующими характеристиками:

1. "Легкий доступ к информации и управление ею." Alibaba предоставляет компаниям и продавцам удобные услуги по продажам и обучению. Компании и продавцы могут свободно входить в базу данных покупателей, чтобы проверять информацию и напрямую связываться с иностранными покупателями.

В то же время компания Alibaba разработала идеальные функции фонового управления, такие как банк изображений, отображение групп продуктов и функции многопользовательского управления, так что веб-сайт доступен только на крупных профессиональных сайтах и обеспечивает большое удобство для клиентов.

- 2 Платежных инструмента, соответствующих национальным условиям Китая. Поскольку несовершенная кредитная система Китая

ограничивает развитие электронной коммерции, компания Alibaba разработала Alipay, платежный инструмент с китайской спецификой, чтобы решить эту проблему.

До появления Alipay онлайн-транзакции сначала оплачивались, а затем отправлялись.

Эта форма транзакций ставит под угрозу способность покупателей получать товары вовремя, в нужном качестве и в нужном количестве после оплаты, что снижает интерес к онлайн-транзакциям; Alipay использует сторонний способ оплаты с гарантией, который значительно снижает риск транзакции.

3 Идеальная рейтинговая система. В компании Alibaba есть полноценная рейтинговая система. Обе стороны транзакции представляют собой оценку другой стороны после завершения транзакции. Оценка отображается на другой странице и дает обеим сторонам ссылку на следующую транзакцию. Эта система оценки ограничивает возникновение недоверия между двумя сторонами и делает транзакцию более надежной и простой.

Название компании и доменное имя веб-сайта Alibaba взяты из сказок и хорошо известны людям. Слоги яркие и звучные, их легко запомнить, и они помогают повысить узнаваемость бренда. По мере увеличения количества кликов в Интернете его популярность также продолжала расти, что быстро повысило ценность бренда Alibaba.

Компания Alibaba создала форумы на Alibaba и Taobao, чтобы упростить централизованный доступ к отзывам клиентов и обмен информацией между ними, а также предлагает онлайн-инструменты для обмена мгновенными сообщениями.

. Коммуникационные сервисы, такие как Tradelink, Yahoo Messenger и Taobao Wangwang, позволяют клиентам в любое время обсуждать деловые вопросы и быстро обрабатывать отзывы клиентов, получать самую свежую информацию о спросе и предложении и наслаждаться эффективными онлайн-развлечениями.

В начале своего основания компания Alibaba предоставила своим членам бесплатную регистрацию и доступ к информационным услугам и быстро заняла лидирующие позиции на рынке; членские взносы стали взиматься только после того, как количество клиентов достигло определенного у Членских взносов Chengxingtong составляют 2800 юаней / 365 долларов США в год, в то время как членские взносы "китайских поставщиков" составляют 41,2 миллиона юаней в год. Основной доход поступает от китайских поставщиков и членских взносов Chengxingtong.

В первые дни своего основания Taobao и Alipay также следовали стратегии развития свободного рынка. На данный момент Taobao по-прежнему предоставляет бесплатные услуги. После успешного запуска в

2007 году Alipay взимает определенный процент комиссионных за транзакции не только с Taobao и Alibaba.

Компания Alibaba родилась в Ханчжоу, распространилась в дельте Янцзы и по всей стране, но добилась успеха во всем мире и стала мировым лидером в области электронной коммерции.

По этой причине экономика Чжэцзяна создала благодатную почву для роста компании Alibaba. Его рыночная экономика, высокая доля малых и средних частных предприятий, а также интенсивная и ориентированная на экспорт промышленная среда - все это очень хорошо подходит для развития электронной коммерции, что создает благоприятные условия для роста и развития компании Alibaba.

В то же время компания Alibaba позиционируется на мировом рынке и запустила различные веб-сайты, ориентированные на разные языки, культуры и традиционные рынки по всему миру. Например, Alibaba International предоставляет глобальным импортерам информацию о товарах от поставщиков из Китая и других стран-производителей, в то время как компания Alibaba Китай является внутренним рынком онлайн-торговли B2B в Китае, а Alibaba Япония создана для японского рынка. Компания Alibaba также выпустила версии Alibaba на неанглоязычном языке для неанглоязычных стран, такие как корейская и испанская версии. Это помогло компании Alibaba, расширить свое присутствие в различных регионах и на рынках, а также расширить каналы сбыта продукции и услуг и сыграл важную роль в содействии глобальному развитию компании Alibaba.

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Чжан Цян
студент магистратуры
Московский педагогический государственный университет

ТРАНСФОРМАЦИОННЫЕ ПОДХОДЫ К ОРГАНИЗАЦИОННОМУ РАЗВИТИЮ: УРОКИ, ИЗВЛЕЧЁННЫЕ ИЗ ИСТОРИИ ALIBABA

Аннотация. В статье выявлены трансформационные подходы к организационному развитию и уроки, извлечённые из истории ALIBABA.

Ключевые слова: компания, покупатель, интеллект, обслуживание.

Zhang Qiang
graduate student
Moscow Pedagogical State University

TRANSFORMATIONAL APPROACHES TO ORGANIZATIONAL DEVELOPMENT: LESSONS LEARNED FROM THE HISTORY OF ALIBABA

Abstract. The article identifies transformational approaches to organizational development and lessons learned from the history of ALIBABA.

Keywords: company, customer, intelligence, service.

Трансформационные подходы к организационному развитию играют особо значимую роль в успехе современных международных организаций. Такие подходы включают в себя внедрение новых технологий, разработку инновационных бизнес-моделей и создание культуры постоянного развития и гибкости. Эти стратегии позволяют организациям быть адаптивными в меняющейся бизнес-среде, укреплять конкурентные преимущества и достигать устойчивого роста. Компания ALIBABA, ведущий гигант в области электронной коммерции, показывает, как инновационные и трансформационные стратегии влияют на организационное развитие в глобальном масштабе.

Компания Alibaba является первооткрывателем и крупнейшим розничным продавцом, предлагающим своим партнерам и клиентам облачные технологии, большие данные и искусственный интеллект для решения индивидуальных бизнес-задач. Компания активно продвигает концепцию новой розничной торговли в Китае и за его пределами как самостоятельно, так и через партнеров. Существует множество примеров успешной реализации концепции в Юго-Восточной Азии и несколько в Европе

Концепция "новой розничной торговли", реализуемая Alibaba Group, основана на трех основных компонентах:

- потребители, которым гарантирован максимальный комфорт при совершении покупок и вокруг которых простирается вся экосистема;
- продукты, предлагаемые потребителям;
- места, где происходит потребление.

Компания Alibaba видит, что на трансформацию розничной торговли влияют персонализированные услуги, интеллектуальные системы управления цепочками поставок и новый клиентский опыт, связанный с переходом магазинов из офлайн в онлайн. Развитие вышеупомянутых подходов открывает новые возможности для создания ценности для компании:

- превращение потенциального клиента в настоящего клиента;
- увеличение большего количества повторных покупок;
- создание площадки для взаимодействия с клиентом;
- оптимизация затрат, которая становится особенно актуальной в связи с большой популярностью онлайн-покупок, особенно в Китае.

Есть много новых брендов, у которых вообще нет физических торговых точек.

Отсутствие широкой розничной сети означает, что они используются только в ключевых местах, например, в качестве центров презентации продукции.

Стратегия "Новый ритейл" и инновации в компании ALIBABA

Стремление к инновациям привело компанию ALIBABA к разработке и внедрению стратегии "Новый ритейл", задача которой объединить онлайн и офлайн торговлю, интегрируя цифровые технологии в традиционные розничные операции. Данная стратегия направлена на повышение эффективности бизнес-процессов, улучшение качества клиентского сервиса и создание бесшовного покупательского пути. В рамках "Нового ритейла" компания ALIBABA внедряет интеллектуальные системы управления складами, персонализированную рекламу и аналитику данных, позволяющую учесть предпочтения и поведение каждого отдельного клиента. Такой подход не только способствует росту продаж и клиентской лояльности, но и дает компании ALIBABA преимущество в сфере конкуренции за внимание покупателей.

Современный покупатель постоянно совершает покупки лицом к лицу и удаленно, что вынуждает компанию использовать оба канала связи с клиентом. В рамках новой концепции розничной торговли компания Alibaba создает собственную унифицированную платформу, которая объединяет как офлайн-пользователей, так и онлайн-пользователей. Это реализуется благодаря возможностям целевого маркетинга, а также интеграции систем рекомендаций, которые предоставляют услугу персонализации независимо от того, где вы взаимодействуете с брендом.

Идея нового подхода к трансформации розничного бизнеса заключается не в том, чтобы охватить всех клиентов одинаковыми сообщениями и сосредоточиться не только на продвижении вашего бренда, но и на индивидуализации вашей маркетинговой деятельности. Это стало возможным благодаря внедрению нового типа клиентской платформы обработки данных CRM (CDP), которая вместе с системами персонализации позволяет таргетировать рекламу и привлекать клиентов по различным каналам связи, таким как социальные сети.

Другая сторона новой концепции розничной торговли заключается в преобразовании физических магазинов за счет использования таких услуг, как Click & Collect, доставка и использование мобильных телефонов в магазинах. Внедрение интеллектуальных PoS-систем позволяет не только регистрировать транзакции, но и считывать данные клиентов, например, с центральной платформы, чтобы продавец мог понять, с каким конкретным человеком он имеет дело и что может его заинтересовать. Кроме того, PoS-терминалы могут использоваться для привлечения неактивных клиентов, например, с помощью купонов или ваучеров, которые автоматически генерируются на платформе обработки данных клиентов.

Использование машинного обучения и искусственного интеллекта, таких как компьютерное зрение, помогает анализировать поведение покупателей в магазине, визуализируя классические тепловые карты и, таким образом, контролируя посещаемость. Компания Alibaba имеет примеры, когда даже небольшие изменения в инфраструктуре физических магазинов оказали сильное влияние на движение по пересеченной местности: диван был убран — общий трафик значительно увеличился.

Благодаря искусственному интеллекту районы, которые ранее не пользовались популярностью у покупателей, могут быть лучше посещены с помощью искусственного интеллекта. Кроме того, компания Alibaba использует технологии машинного обучения для оптимизации ассортимента и цепочки поставок, прогнозируя, какой конкретный продукт поступает от какого поставщика и в какой момент должен быть доставлен в конкретный магазин или склад.

Что касается обслуживания клиентов, компания Alibaba взаимодействует с клиентами через автоматические каналы связи — чат-ботов или интеллектуальных помощников с интеграцией в социальные сети - где можно анализировать общие отзывы посетителей в зависимости от того, что они потребляют. Кроме того, все это может быть интегрировано в общую надежную систему.

Компания Alibaba разработала собственную частную платформу для управления данными клиентов. Система идентифицирует пользователя по любому каналу связи и собирает данные о нем в одном профиле. Это позволяет вам создать подробный профиль клиента, чтобы улучшить

взаимодействие с клиентом, настроить таргетинг на новости и предложения о продаже.

Цифровые каналы, используемые сегодня для общения с покупателями, активно меняются. Существуют традиционные мобильные приложения для электронной коммерции, и есть также примеры того, как социальные сети интегрируются с платформами электронной коммерции в форме прямых трансляций, когда продавец или даже звезда продвигает определенный продукт. Таким образом, CDP позволяет собирать, анализировать и получать доступ к данным клиентов по всем каналам связи на единой платформе.

Возможности CDP позволяют получать даже такие данные, как Device ID, код телефона, IMEI клиента при демонстрации контекстной рекламы через ссылку. Таким же образом анализируется реакция покупателя: когда он кликнул на несколько ссылок, система начинает понимать его профиль. Если же эти действия привели к покупке, то, скорее всего, система уже знает личные данные покупателя. Естественно, зная такие вещи либо информацию соцсети, с покупателем можно взаимодействовать для поддержания лояльности либо побуждения к повторной покупке.

Использование ID и тегов для клиентов в CDP важно для их сегментирования. Такой динамический подход для анализа целевых групп позволяет управлять группами таргетированно, направляя им разные предложения и сообщения в зависимости от того, с какой группой ведется работа.

Действия клиента запускают ответную реакцию платформы. Например, если у покупателя есть мобильное приложение Alibaba, то система генерирует приветственное сообщение на e-mail или в смс. Если же потребитель

совершает первую покупку, то система автоматически генерирует для него персонализированное предложение.

Как видим, ядром стратегии «Новый ритейл» компании Alibaba является многоканальное взаимодействие с клиентом. Благодаря современным технологиям и инструментам, о которых шла речь в статье, компании удастся адаптировать собственные средства продвижения товаров и услуг под образ жизни покупателей и предугадывать их возрастающие потребности. Результатом такой стратегии стало доверие и лояльность клиентов, что в свою очередь привело к достижению заметных результатов для Alibaba Group.

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*Чжан Цян
студент магистратуры
Московский педагогический государственный университет*

ГЛОБАЛЬНАЯ ЭКСПАНСИЯ: СТРАТЕГИИ МЕЖДУНАРОДНОГО РОСТА КОМПАНИИ ALIBABA И ИХ ПРИМЕНИМОСТЬ В ДРУГИХ СЕКТОРАХ

Аннотация. В статье выявлены роль глобальной экспансии и стратегии международного роста компании ALIBABA и их применимость в других секторах.

Ключевые слова: коммерция, бренд, рынок, потенциал.

*Zhang Qiang
graduate student
Moscow Pedagogical State University*

GLOBAL EXPANSION: ALIBABA'S INTERNATIONAL GROWTH STRATEGIES AND THEIR APPLICABILITY IN OTHER SECTORS

Abstract. The article identifies the role of global expansion and international growth strategies of ALIBABA and their applicability in other sectors.

Keywords: commerce, brand, market, potential.

Глобальная экспансия и стратегии международного роста имеют большое значение в современном мире бизнеса. Стремительное развитие технологий, увеличение мобильности капитала и налаженное, более простое общение между странами делают глобальный рынок все более доступным и привлекательным для организаций, которые хотят расширить свое присутствие за пределами родной страны. В таком постоянно меняющемся мире разработка эффективных стратегий международного роста становится важным компонентом успеха для каждого бизнеса. Такие стратегии должны учитывать географические, культурные, экономические и политические особенности различных рынков, а кроме того, способы привлечения и удержания клиентов.

Когда речь идет о глобальной экспансии, компании используют различные стратегии выхода на международный рынок. Некоторые из них предпочитают стратегию органического роста, планомерно расширяя свою географию, подстраиваясь под условия местных рынков. Другие же выбирают более стремительное масштабирование через покупку

существующих бизнесов или заключение стратегических партнерств с местными компаниями. Необходимо также учитывать разные каналы продаж, предпочтения потребителей и конкурентную среду каждой страны.

Компания Alibaba, являясь одной из ведущих игроков в мировой электронной коммерции, активно использует стратегии международного роста для расширения своего влияния за пределы Китая. Ее опыт и подходы могут служить примером и вдохновением для других компаний, стремящихся преуспеть на глобальном рынке.

Alibaba Group - крупнейшая в Китае платформа для онлайн- и мобильной коммерции и крупнейшая в мире платформа для получения дохода. Их выручка в 2018 году составила 248 миллиардов долларов, что больше, чем у EBay и Amazon вместе взятых. Выручка компании Alibaba в 2018 году составила 56,2 миллиарда долларов, увеличившись на 48% по сравнению с аналогичным периодом прошлого года, что является огромной суммой для компании такого размера.

Компания Alibaba не продает товары напрямую, а предлагает только торговые платформы, с помощью которых продавцы и покупатели совершают транзакции. Компания зарабатывает комиссионные за транзакции, рекламу и другие услуги. Alibaba является мировым лидером по объему продаж. И чем выше доход, тем выше комиссия для владельца платформы.

На крупнейших платформах компании – Taobao.com, Tmall.com и Juhuasuan.com - составляет около 82% продаж.

Как и в случае с крупными компаниями, каждое подразделение компании Alibaba имеет свой собственный совет директоров, технические команды и разрабатывает свои собственные платформы. Все подразделения объединены общей целью - развитием китайского Интернета.

Что выделяется в компании Alibaba, так это не полный отказ от взаимозависимости между бизнес-единицами, а типичный для конгломератов подход к разработке стратегии. Группа не диктует решения сверху вниз, а разрабатывает стратегию снизу-вверх, то есть внутри бизнес-подразделений и отделов. "Когда между отделами возникают конфликты, корпоративная культура склонна отдавать предпочтение одному или другому отделу, а не группе в целом", - говорится в исследовании. "Ма категорически заявляет руководителям отделов, что они вольны делать то, что лучше всего подходит для их бизнеса".

Основным источником дохода компании Alibaba является электронная коммерция. В 2018 финансовом году объем продаж электронной коммерции составил 133,9 миллиарда иен, что составляет 85% от общего объема продаж. Сильный и известный бренд - еще одно преимущество Alibaba Group. Компания вложила значительные средства в создание бренда. Компания Alibaba может привлечь внимание не только к социальным сетям, но и к средствам массовой информации. Новости о

быстром росте, иностранных инвестициях и приобретениях вызывают интерес к компании и ее бренду со стороны внешнего мира. В 2018 году компания Alibaba инвестировала 8,8 млрд юаней в рекламу.

В последние годы узнаваемость бренда Alibaba возросла в основном за счет улучшения качества продукции и уровня обслуживания. Все больше иностранцев хотят покупать китайские товары через платформу электронной коммерции. При принятии решения о выходе на внешний рынок не менее важно определить географический потенциал страны. Давайте рассмотрим конкретные стратегии компании Alibaba на внешних рынках (табл. 2).

Стратегия компании	Плюсы	Минусы
Партнерство с местными продавцами и агентами	Партнер управляет операционными вопросами в местном масштабе, начиная от маркетинга, заканчивая логистикой;	Ограниченный контроль над продвижением бренда и ценообразованием на рынке
	Относительно низкий барьер для входа на рынок	Большое количество времени, потраченного на поиск и проверку продавца
Создание команды в пределах Китая	Полный контроль над операционной деятельностью, продвижением бренда и интеллектуальной собственностью	Крупные инвестиции и низкая начальная прибыль
	Близость к потребителю и политическим трендам	Обширное исследование рынка, политики и нормативных документов
	Устойчивая инфраструктура для будущей экспансии	
Запуск через стороннюю торговую площадку и/или фирменный сайт	Простота в тестировании продаж и покупательной способности	Высокая конкуренция на торговой площадке и длительный срок для получения платежей
	Торговые площадки предлагают высокий потенциал движения товаров и логистику на аутсорсинге	Крупные инвестиции в продвижение товаров

Рисунок 1 – Стратегии ALIBABA

После принятия решения выхода на зарубежный рынок, не менее важным является определение географических потенциалов страны.

Стратегии обычно объединяются вокруг трех подходов. Во-первых, партнерство с местными поставщиками. Во-вторых, инвестирование в команду в пределах Китая. В зависимости от размера это может включать локализацию, маркетинг, логистику, поддержку клиентов, продажи и инжиниринг. В-третьих, запуск через стороннюю торговую площадку и\или фирменный сайт - например, Tmall и JD - и / или брендированный сайт электронной коммерции. Фирменные сайты стоят дороже, но они предоставляют больше данных и улучшают отношения с клиентами.

Например, компания Alibaba завербовала двух бывших руководителей Goldman в качестве президента компании Alibaba и вице-президента Ant Financial, ответственного за глобальный бизнес, а также сингапурскую компанию V-Key, занимающуюся технологиями мобильной безопасности и шифрования, и другие компании.

В сфере электронной коммерции AliExpress предлагает МСП ведение бизнеса с оплатой и логистикой. После переживания спада 2015 года, квартальные результаты за июнь 2016 года показали, что выручка AliExpress увеличилась на 123% по сравнению с аналогичным периодом прошлого года.

Таким образом, можем сделать вывод, что Alibaba создает продукты на быстрорастущих рынках и пытается занять там лидирующее положение. Выбор правильной стратегии поможет ей продолжать стремительный рост, что должно повлечь за собой увеличение цен на акции, увеличение прибыли и торгового оборота в будущем.

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*Чжан Цян
студент магистратуры
Московский педагогический государственный университет*

РОЛЬ ИННОВАЦИЙ В СТРАТЕГИЯХ РАЗВИТИЯ МЕЖДУНАРОДНЫХ КОМПАНИЙ

Аннотация. В статье выявлены роль инноваций в стратегиях развития международных компаний

Ключевые слова: рынок, система, капитал, доход.

*Zhang Qiang
graduate student
Moscow Pedagogical State University*

THE ROLE OF INNOVATION IN THE DEVELOPMENT STRATEGIES OF INTERNATIONAL COMPANIES

Abstract. The article identifies the role of innovation in the development strategies of international companies.

Keywords: market, system, capital, income.

В современном мире многие компании сталкиваются с необходимостью постоянной гибкости относительно меняющихся условий рынка. Важную роль в этом процессе играют трансформационные подходы к организационному развитию, так как они дают возможность организация адаптироваться к новым вызовам, повысить свою эффективность и оставаться на плаву. Инновации, в свою очередь, выступают двигателем этой трансформации, так как они позволяют внедрять новые идеи, технологии и подходы, улучшающие процессы, продукты и услуги компании. Роль инноваций в стратегиях развития в обеспечении постоянного развития и роста компании в условиях быстро меняющегося рынка, создавая новые возможности для роста и подтверждения клиентских ожиданий.

Компания ALIBABA, основанная в 1999 году, на сегодняшний день является одним лидеров в сфере электронной коммерции в мире. Компания активно применяет последние достижения в области машинного обучения и искусственного интеллекта для оптимизации своей деятельности, что позволяет ей эффективно анализировать поведение покупателей и оптимизировать ассортимент и логистику.

Основная цель развития рынка - создать большую серверную базу с современными компьютерами, способными обрабатывать информацию без задержек и ошибок, чтобы пользователи могли быть уверены в наличии высококачественных продуктов и услуг. Критическое развитие рыночной системы имеет важное значение для оценки рисков и стратегий в макроэкономической среде и внутреннего качества предприятий электронной коммерции. Критерием SWOT-анализа является наиболее эффективная оценка перспектив рынка электронной коммерции для компании Alibaba: сила компании на рынке электронной коммерции заключается в том, что она максимально мобильна в доставке и приобретении товаров, необходимых конечному потребителю.

Она является важнейшей системой, которая создаёт дополнительный капитал и возможности для развития рынка за счет перепродажи продукции через дополнительные кластеры по всей компании. Это комбинация электронной коммерции, которая позволяет любому получить доступ к конечным продуктам и продукции крупных заводов в Китае и Юго-Восточной Азии. Слабость компании на рынке электронной коммерции заключается в том, что потребительский спрос неравномерен, а протяженность логистического канала является одной из самых дорогостоящих проблем при доставке нужных товаров покупателям.

Вот почему компания хочет работать с системой "вовремя", которая помогает управлять рыночными условиями во время исполнения заказа, а не при его реализации на рынке. Компания работает с системой управления изменениями для хранения и распределения товаров, чтобы обеспечить максимальную прибыль при продаже и распределении товаров среди клиентов. Именно этот факт определяет рыночный потенциал отрасли с точки зрения реальности функционирования рыночной торговли. Потенциал рынка электронной коммерции заключается в разработке системы удаленной связи, продаже дополнительного информационного контента и создании коллективного управления виртуальной реальностью, что дает компании прекрасную возможность создать глобальную систему развития. Еще одна возможность на рынке электронной коммерции - создать отделы обслуживания клиентов, основанные на автоматизированных потребностях клиентов.

Любая система, состоящая из логических кодов и специальных элементов управления машинным обучением, запоминает, что потребитель хочет купить, с учетом видимости повседневных потребностей, а также с помощью баннеров и других рекламных элементов. В этом формате система автоматически обрабатывает потребности каждого клиента, создавая ценность для компании и принося потенциальный доход. Основным риском компании на этом рынке является удержание клиентов и вероятность того, что цепочка поставок реальных продуктов будет нарушена из-за эпидемий. Если заказ задерживается, потребности человека заменяются простым

решением, которое оперативно обрабатывает доставку или замену товара и возвращает деньги. Вот почему электронная коммерция представляет большой риск для реальных товаров, поскольку предприятиям и потребителям требуется время, чтобы доставить достаточное количество товаров во время экологического кризиса. Кризис управления рынком и систематическая нестабильность являются основными факторами окружающей среды, которые могут повлиять на эффективность производства.

Другая проблема заключается в том, что количество влиятельных сотрудников сокращается во время эпидемии, и существует риск потери информации и технологий с программными и аппаратными настройками, которые важны для компании, в процессе управления рынком. Следовательно, необходимо объединить функции и возможности, чтобы ускорить внедрение Интернета вещей для конечных пользователей и снизить затраты на доставку товаров и заказов. Эти параметры должны позволить максимально точно настроить серверную службу с точки зрения доступа к продукту и рыночного тестирования, чтобы улучшить рыночные настройки и использовать современные и проверенные технологии.

Формирование системы торговых рекомендаций и рыночный подход позволяют конечным пользователям разрабатывать стратегии развития компании, позволяя им совместно предлагать реальные продукты. Сочетание сильных сторон и угроз, снижающих риск нехватки персонала, требует наличия кадровых ресурсов, необходимых для параллельной организации обучения персонала.

В сочетании с возможностями централизованного удаленного управления развертыванием. Основная группа компаний в категории продаж фокусируется на косметике, текстильных и кожгалантереях, одежде и обуви для потребителей и на уровне потребительских цен. Клиенты предпочитают все услуги, предлагаемые компанией, потому что они могут вернуть продукт сразу обратно продавцу после получения программы лояльности и проверяют, подходит ли продукт.

Кроме того, в зависимости от уровня сегментации потребители с меньшей вероятностью получают возвращают такие товары, как косметика, одежда и другие товары, бытовая электроника, одежда и обувь, дополнительные детали и другое съемное оборудование. Тем не менее, трудно найти эти дополнительные детали на рынке запчастей без большей маржи и качества, чем у производителя, поэтому очень трудно конкурировать с сервисными агентствами и малыми предприятиями на рынке, чтобы даже искусственно установить самые дешевые детали. Поэтому положение отрасли на этом рынке должно оцениваться правильно и последовательно. Тенденции развития отрасли позволяют организовывать решения основных проблем.

Это означает распространение продукта непосредственно к конечной точке конечному потребителю без лишних затрат времени. Это упрощает все вопросы удовлетворенности клиентов и удаляет точки продаж на рынке из цепочки продаж, ускоряя получение доходов и привлекая рыночный спрос в качестве дополнительного отдела промышленного развития. Если компания специализируется на продаже косметики и одежды, а также одежды и бытовой электроники, где уровень внешнего риска проекта очень низок, то спрос на такие товары будет высоким, следовательно — маржинальным.

Внутренний риск компании минимален — это нарушение качества при доставке товаров конечным пользователям в течение определенного периода времени. Другими словами, цепочка рисков находится внутри организации, и основной риск компании заключается в том, что производство высококачественной продукции основано на моделировании рисков и распределении рынков, материалов и товаров первой необходимости.

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Чжоу Ицзы
студент магистратуры
Московский педагогический государственный университет

СТРАТЕГИЯ ИНТЕГРАЦИОННОГО РОСТА КОМПАНИИ

Аннотация. В статье рассматривается сущность, преимущества и недостатки стратегии интеграционного роста организации.

Ключевые слова: стратегия, организация, интегрированный рост, стратегии интеграционного роста.

Zhuo Yizi
undergraduate student
Moscow Pedagogical State University

THE ESSENCE, ADVANTAGES AND DISADVANTAGES OF THE ORGANIZATION'S INTEGRATION GROWTH STRATEGY

Abstract. The article examines the essence, advantages and disadvantages of an organization's integration growth strategy.

Keywords: strategy, organization, integrated growth, integration growth strategies.

Стратегия интеграционного роста относится к продуманному подходу, принятому организациями, направленному, прежде всего, на расширение их операций и присутствия на рынке посредством слияний, поглощений, альянсов или партнерских отношений [1]. Эта стратегия влечет за собой интеграцию различных аспектов деловой активности, таких как ресурсы, технологии, рынки и возможности, с целью достижения синергии, экономии за счет масштаба и повышения конкурентоспособности. Интегративный рост включает в себя стратегические действия, которые способствуют консолидации дополнительных активов, опыта и рыночных позиций для создания ценности, и поддержания долгосрочных траекторий роста. Эту стратегию часто проводят организации, стремящиеся извлечь выгоду из возможностей расширения, диверсификации или проникновения на рынок, одновременно снижая риски, связанные с органическим ростом или конкурентным давлением.

Стратегия интегрированного роста становится рациональным выбором для фирмы, когда существуют значительные возможности для повышения прибыльности и отдачи от инвестиций посредством контроля над различными стратегически важными звеньями в цепи поставок, такими

как производство, распределение и предложение [2]. Более того, компании принимают эту стратегию, когда они оказываются в достаточно надежной бизнес-структуре, но не имеют ресурсов или возможностей для реализации стратегии концентрированного роста. В таких случаях интеграция дополняет основные цели фирмы, не препятствуя им. Примечательно, что стратегия влечет за собой не только структурные слияния или поглощения, но и внутренние преобразования внутри компании. По сути, интеграционный рост служит стратегическим путем для компаний, чтобы укрепить свои позиции на рынке, извлечь выгоду из синергии и укрепить свое конкурентное преимущество. Консолидируя контроль над критическими аспектами цепочки создания стоимости, компании могут оптимизировать операционную эффективность, использовать эффект масштаба и повысить общую производительность.

Различают два вида вертикальной интеграции и горизонтальной. Вертикальную интеграцию можно разделить на два типа в зависимости от ее направления: вертикальная регрессивная интеграция и вертикальная прогрессивная интеграция. Вертикальная регрессивная интеграция предполагает получение контроля над поставщиками. Эта стратегия используется для защиты важнейших источников поставок или для доступа к новым технологиям, имеющим решающее значение для основных операций [3]. Предприятия, реализующие регрессивную интеграцию, ассимилируют функции, ранее выполнявшиеся поставщиками, получая таким образом контроль над источниками сырья и производством комплектующих. С другой стороны, вертикальная прогрессивная интеграция фокусируется на управлении системами распределения. Эта стратегия предполагает приобретение или усиление контроля над структурами, расположенными между предприятием и конечным потребителем, в частности каналами сбыта и сбыта. Компании прибегают к постепенной интеграции, когда им трудно найти посредников, предлагающих удовлетворительное обслуживание клиентов, или, когда они стремятся лучше понять поведение потребителей [4].

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Чжоу Ицзы
студент магистратуры
Московский педагогический государственный университет

ОРГАНИЗАЦИОННО-ЭКОНОМИЧЕСКАЯ ХАРАКТЕРИСТИКА КОМПАНИИ «HUAWEI»

Аннотация. Данная работа рассматривает стратегии интеграционного роста на примере компании Huawei в сфере телекоммуникационных технологий. Исследуются методы, использованные Huawei для расширения своего бизнеса, такие как слияния, поглощения, вертикальная интеграция и стратегические партнерства. Анализируются преимущества, риски и вызовы, связанные с реализацией этих стратегий, а также их влияние на конкурентоспособность и рыночное положение компании. Полученные результаты подчеркивают важность разумного управления рисками и принятия стратегических решений для успешной реализации стратегий интеграционного роста в современной бизнес-среде.

Ключевые слова: Huawei, стратегия интеграционного роста, телекоммуникационные технологии, слияния, поглощения, вертикальная интеграция, стратегические партнерства, конкурентоспособность, риски, управление рисками.

Zhuo Yizi
graduate student
Moscow Pedagogical State University

THE ESSENCE, ADVANTAGES AND DISADVANTAGES OF THE ORGANIZATION'S INTEGRATION GROWTH STRATEGY

Abstract. This study examines the strategies of integration growth using Huawei as a case study in the telecommunications technology sector. The methods employed by Huawei to expand its business, such as mergers, acquisitions, vertical integration, and strategic partnerships, are explored. The advantages, risks, and challenges associated with implementing these strategies, as well as their impact on competitiveness and market positioning, are analyzed. The findings underscore the importance of prudent risk management and strategic decision-making for the successful implementation of integration growth strategies in today's business environment.

Keywords: Huawei, integration growth strategy, telecommunications technology, mergers, acquisitions, vertical integration, strategic partnerships, competitiveness, risks, risk management.

Введение

Стратегия интеграционного роста представляет собой существенный инструмент в корпоративном мире, позволяющий компаниям расширять свои возможности и увеличивать конкурентоспособность путем объединения ресурсов и бизнес-возможностей. В этом контексте рассмотрим опыт компании Huawei, глобального лидера в сфере телекоммуникационных технологий, которая успешно применила интеграционные стратегии для укрепления своего положения на рынке.

Целью данного исследования является анализ сущности, преимуществ и недостатков стратегии интеграционного роста организации, а также изучение опыта компании Huawei в применении стратегии интеграционного роста для достижения конкурентных преимуществ.

Задачи исследования:

1. Изучить стратегии интеграционного роста, применяемые Huawei для расширения своего бизнеса и увеличения рыночной доли.

2. Проанализировать преимущества, которые компания получила благодаря реализации интеграционных стратегий, включая экономию за счет масштаба, доступ к новым рынкам и увеличение инновационного потенциала.

3. Выявить недостатки и риски, с которыми столкнулась компания Huawei в процессе реализации стратегий интеграционного роста, включая высокие инвестиционные требования и сложности управления сложными организационными структурами.

4. Определить ключевые факторы успеха и вызовы, которые могут быть полезными для других компаний, стремящихся использовать интеграционные стратегии для своего развития.

Объектом исследования является компания Huawei и ее опыт в применении стратегии интеграционного роста для развития своего бизнеса в сфере телекоммуникационных технологий.

Предметом исследования являются стратегии интеграционного роста, использованные компанией Huawei, а также преимущества, риски и вызовы, связанные с их реализацией.

Методология исследования предполагает смешанный подход, сочетающий количественный и качественный анализ.

Основная часть. Стратегия интеграционного роста относится к продуманному подходу, принятому организациями, направленному, прежде всего, на расширение их операций и присутствия на рынке посредством слияний, поглощений, альянсов или партнерских отношений²⁴⁷. Эта стратегия влечет за собой интеграцию различных аспектов деловой активности, таких как ресурсы, технологии, рынки и возможности, с целью достижения синергии, экономии за счет масштаба и повышения

²⁴⁷ Бригхем Ю., Гапенски Л. Финансовый менеджмент: полный курс: в 2-х т. пер. с англ. - СПб., Экономическая школа, 2005. Т. 2. 668 с.

конкурентоспособности. Интегративный рост включает в себя стратегические действия, которые способствуют консолидации дополнительных активов, опыта и рыночных позиций для создания ценности, и поддержания долгосрочных траекторий роста. Эту стратегию часто проводят организации, стремящиеся извлечь выгоду из возможностей расширения, диверсификации или проникновения на рынок, одновременно снижая риски, связанные с органическим ростом или конкурентным давлением.

Различают два вида вертикальной интеграции и горизонтальной (см. рис. 1). Вертикальную интеграцию можно разделить на два типа в зависимости от ее направления: вертикальная регрессивная интеграция и вертикальная прогрессивная интеграция. Вертикальная регрессивная интеграция предполагает получение контроля над поставщиками. Эта стратегия используется для защиты важнейших источников поставок или для доступа к новым технологиям, имеющим решающее значение для основных операций²⁴⁸. Предприятия, реализующие регрессивную интеграцию, ассимилируют функции, ранее выполнявшиеся поставщиками, получая таким образом контроль над источниками сырья и производством комплектующих. С другой стороны, вертикальная прогрессивная интеграция фокусируется на управлении системами распределения. Эта стратегия предполагает приобретение или усиление контроля над структурами, расположенными между предприятием и конечным потребителем, в частности каналами сбыта и сбыта. Компании прибегают к постепенной интеграции, когда им трудно найти посредников, предлагающих удовлетворительное обслуживание клиентов, или когда они стремятся лучше понять поведение потребителей²⁴⁹.

²⁴⁸ Арутюнова Д.В. Стратегический менеджмент: учебное пособие. – Таганрог: Изд-во ТТИ ЮФУ, 2014. – 122 с.

²⁴⁹ Аакер, Дэвид. Стратегическое рыночное управление / Дэвид Аакер. – 7-е изд. – Санкт-Петербург: Питер, 2011. – 495 с



Рисунок 1. Виды интеграции

Обоснование интеграции заключается в потенциале повышения прибыльности путем контроля стратегически важных элементов в цепочке поставок, включая производство, закупки и продажи. Можно проводить различные виды вертикальной интеграции, включая полную интеграцию производственной деятельности, частичную интеграцию, когда некоторые компоненты поставляются извне, и квазиинтеграцию через стратегические альянсы без передачи прав собственности.

Горизонтальная интеграция предполагает консолидацию компаний, работающих в одном отраслевом сегменте²⁵⁰. Его основная цель – укрепить позиции фирмы в отрасли путем приобретения конкретных конкурентов или получения контроля над ними. Горизонтальные слияния обеспечивают экономию за счет масштаба, расширяют ассортимент продуктов и услуг, тем самым обеспечивая дополнительные конкурентные преимущества. Зачастую расширение географического рынка стимулирует горизонтальную диверсификацию, побуждая к объединению компаний, производящих аналогичные товары, но работающих на разных региональных рынках. Различные методы облегчают интеграционный рост. Системы соглашений, учитывающие интересы каждого участника наряду с общими интересами, являются одним из таких методов. Участники компрометируют часть своего суверенитета, предвидя выгоды от консолидации маркетинговых действий. На более высоком уровне интеграции возникают холдинговые компании, где одна организация, владеющая контрольным пакетом акций, управляет и направляет других на основе общих интересов. Более жесткая форма

²⁵⁰ Гольдштейн Г.Я. Стратегический менеджмент: конспект лекций. – Таганрог: Изд-во ТРТУ, 2013. – 93 с.

интеграции предполагает приобретение акций у других участников, что приводит к слияниям или поглощениям, позволяющим диктовать условия в пользу корыстных интересов. Самая мягкая форма интеграции влечет за собой личные контакты и «джентльменские соглашения». Иногда фирмы создают филиалы или дочерние компании, специализирующиеся на закупках или торговой посреднической деятельности²⁵¹. Таким образом, интеграционные стратегии роста различаются по своему подходу и реализации (см. рис. 2), выступая в качестве критически важных инструментов для компаний, стремящихся повысить конкурентоспособность, обеспечить стратегические ресурсы и расширить охват рынка.

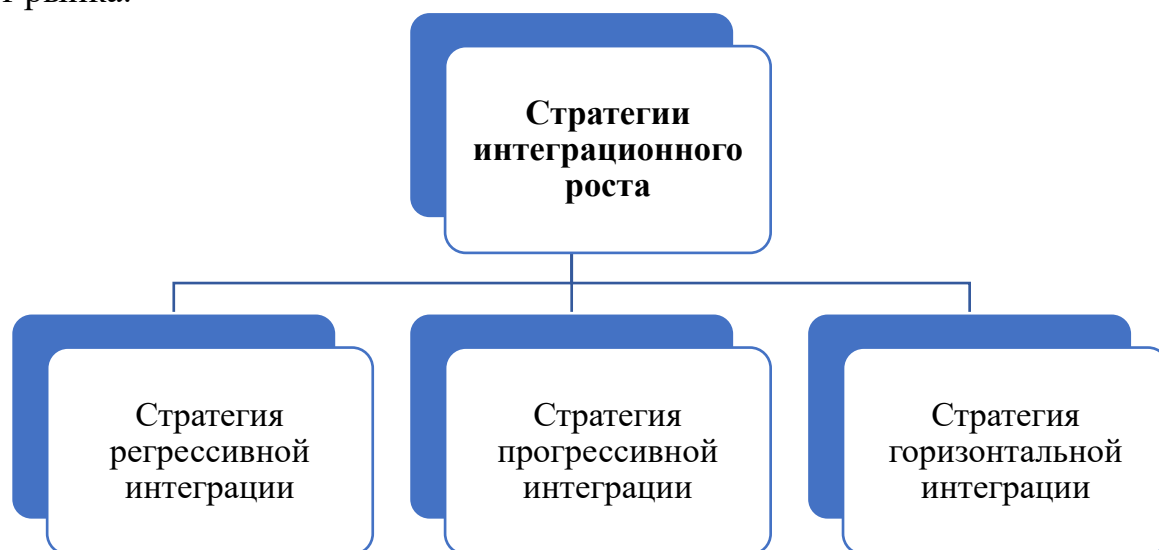


Рисунок 2. Стратегии интеграционного роста²⁵²

Реализация стратегии интеграционного роста предоставляет организациям возможность выхода на новые рынки и выхода в неосвоенные сегменты клиентов²⁵³. Расширяя свою деятельность за счет слияний, поглощений или стратегических альянсов, компании могут получить выход в географические регионы или демографические рынки, где они ранее имели ограниченное присутствие.

Кроме того, экспансия Huawei на развивающиеся рынки, такие как Африка и Юго-Восточная Азия, предоставила компании доступ к миллионам новых клиентов, ранее недостаточно обслуживаемых устоявшимися игроками²⁵⁴. Используя свой опыт в области телекоммуникационной инфраструктуры, Huawei стала ключевым игроком

²⁵¹ Боумэн, К. Стратегия на практике / К. Боумэн; пер. с англ. С. Ивановой [и др.]. – Сер. «Теория и практика менеджмента» – Санкт-Петербург: Питер, 2003. – 250 с.

²⁵² Составлено автором

²⁵³ Дойль, П. Менеджмент. Стратегия и тактика / П. Дойль; пер. с англ. А. Вихровой [и др.]. – Санкт-Петербург: Питер, 1999. – 559 с.

²⁵⁴ Юго-Восточная Азия – будущий центр продуктового ритейла. Официальный сайт Retail.ru. (Электронный ресурс). – URL: <https://www.retail.ru/articles/yugo-vostochnaya-aziya-budushchiy-tsentr-produktovogo-riteyla/> (дата обращения: 18.03.2024)

в предоставлении решений для подключения в регионах с растущим спросом на мобильные и интернет-услуги. Кроме того, акцент Huawei на исследованиях и разработках в сочетании с обширной глобальной сетью исследовательских центров и партнерств позволил компании внедрить передовые технологии и решения, адаптированные к конкретным требованиям различных рынков и клиентских сегментов. Этот стратегический подход не только способствовал росту Huawei, но и укрепил ее позиции в качестве ведущего поставщика телекоммуникационного оборудования и услуг во всем мире.

Рассматривая опыт Huawei, стратегии роста интеграции столкнулись с несколькими недостатками. Компания столкнулась с существенными инвестиционными требованиями при реализации интеграционных инициатив, включая слияния, поглощения и вертикальную интеграцию. Эти высокие инвестиционные затраты истощили финансовые ресурсы Huawei и повлияли на краткосрочную прибыльность. Кроме того, Huawei борется с рисками, связанными с управлением сложными организационными структурами в результате действий по интеграции. Культурные конфликты, нормативные препятствия и технологические проблемы создали значительные препятствия для беспрепятственной интеграции и реализации синергии. Кроме того, Huawei столкнулась с потенциальными проблемами при слияниях и поглощениях, включая вопросы, связанные с культурной интеграцией, оперативным согласованием и соблюдением нормативных требований. Помимо прочего существует риск потери внимания к основным бизнес-процессам из-за усилий по интеграции, что может привести к пренебрежению инновациями продукта, качеством обслуживания клиентов и операционной эффективностью.

Заключение

В заключении, анализ интеграционного роста на примере опыта компании Huawei подчеркивает, как преимущества, так и вызовы, связанные с этой стратегией. Подход, направленный на расширение бизнеса через объединение ресурсов и возможностей, может принести значительные экономические и инновационные выгоды. Однако, необходимость значительных инвестиций, управление сложными организационными структурами и риск потери фокуса на основных бизнес-процессах выделяются среди основных проблем. Важно понимать, что эффективное внедрение интеграционных стратегий требует тщательного планирования, управления рисками и стратегического мышления. Рациональное принятие решений, основанное на анализе преимуществ и недостатков, а также максимальное внимание к деталям в процессе интеграции являются ключевыми факторами успеха. Несмотря на сложности, компании, смело принимающие вызов интеграционного роста, могут расширить свою деятельность, укрепить свои позиции на рынке и стать лидерами в своей отрасли.

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Чжо Ицзы
студент магистратуры
Московский педагогический государственный университет

АНАЛИЗ ПОКАЗАТЕЛЕЙ ФИНАНСОВО-ЭКОНОМИЧЕСКОЙ ДЕЯТЕЛЬНОСТИ КОМПАНИИ «HUAWEI»

Аннотация. Данная статья посвящена анализу финансово-экономической деятельности крупной транснациональной корпорации "Huawei" за период с 2020 по 2023 годы. В работе рассматриваются основные финансовые показатели компании, такие как выручка, операционная прибыль, инвестиции в исследования и разработку, а также общие операционные расходы. Основное внимание уделяется тенденциям и изменениям в финансовой деятельности "Huawei" за рассматриваемый период, а также оценке ее финансовой устойчивости и конкурентоспособности.

Ключевые слова: Huawei, финансовый анализ, экономическая деятельность, выручка, операционная прибыль, инвестиции в исследования и разработку, операционные расходы, финансовая устойчивость, конкурентоспособность.

Zhuo Yizi
graduate student
Moscow Pedagogical State University

ANALYSIS OF FINANCIAL AND ECONOMIC PERFORMANCE INDICATORS OF THE HUAWEI COMPANY

Abstract. This paper is dedicated to the analysis of the financial and economic performance of the large transnational corporation "Huawei" for the period from 2020 to 2023. The study examines the key financial indicators of the company, such as revenue, operating profit, research and development investments, as well as total operating expenses. The main focus is on trends and changes in Huawei's financial activities during the specified period, as well as evaluating its financial stability and competitiveness.

Keywords: Huawei, financial analysis, economic activity, revenue, operating profit, research and development investments, operating expenses, financial stability, competitiveness.

Введение

Анализ финансово-экономической деятельности компании "Huawei" представляет собой важный инструмент для понимания ее текущего финансового состояния, стратегических направлений и перспектив развития. В контексте быстро меняющегося рынка информационных и коммуникационных технологий (ИКТ) роль такого анализа становится особенно значимой, учитывая влияние внешних факторов, таких как санкции и технологические тенденции. Компания "Huawei" является одним из ведущих мировых игроков в области ИКТ, и ее финансовая деятельность привлекает внимание как инвесторов, так и аналитиков. В данной статье мы проведем анализ ключевых финансовых показателей "Huawei" за период с 2020 по 2023 годы, включая выручку, операционную прибыль, инвестиции в исследования и разработку, а также общие операционные расходы.

Целью данного анализа является выявление основных тенденций и закономерностей в финансовой деятельности компании "Huawei", а также оценка ее финансовой устойчивости и способности к долгосрочному росту.

Задачи статьи:

1. Провести анализ годовой выручки компании "Huawei" за последние несколько лет с целью выявления тенденций роста или снижения и определения факторов, оказывающих на нее влияние.

2. Анализировать изменения в операционной прибыли "Huawei" за рассматриваемый период, выявляя факторы, влияющие на ее динамику, и оценивая эффективность управления операционными расходами.

3. Изучить объемы инвестиций компании "Huawei" в исследования и разработку за последние годы с целью оценки ее инновационного потенциала и способности к разработке новых продуктов и технологий.

4. Изучить структуру и динамику общих операционных расходов "Huawei", включая расходы на исследования и разработку, административные и коммерческие расходы, с целью определения эффективности управления затратами и выявления ключевых областей расходов.

5. Провести анализ структуры капитала и ликвидности компании "Huawei" для оценки ее финансовой устойчивости и способности к погашению обязательств в долгосрочной перспективе.

Объект исследования: финансово-экономическая деятельность компании "Huawei".

Предмет исследования: финансовые показатели и операционная деятельность компании "Huawei" за 2020-2023 гг.

Информационной базой работы, обеспечивающей репрезентативность исходных данных, достоверность, точность и достоверность выводов, рекомендаций и предложений, послужила годовая и финансовая отчетность компании «Huawei». Данные были взяты с

официального сайта «Yahoo Finance» за последние 3 года, а именно 2021-2023 гг.

Методология исследования предполагает смешанный подход, сочетающий количественный и качественный анализ.

Результаты исследования. Китайская транснациональная корпорация Huawei является мировым лидером в области решений в области информационных и коммуникационных технологий (ИКТ). Решения, продукты и услуги Huawei используются более чем в 170 странах и регионах мира, обеспечивая доступ к ИКТ более чем трети населения мира. Благодаря тому, что все 170 000 сотрудников посвятили себя формированию информационного общества будущего и созданию мира безграничных коммуникаций, влияние Huawei выходит за рамки границ. Более 70 000 сотрудников, занятых в исследованиях и разработках, что составляет примерно 40% глобальной рабочей силы компании, Huawei демонстрирует твердую приверженность технологическому прогрессу²⁵⁵. Создание 16 исследовательских центров в разных странах, таких как Германия, Швеция, США, Франция, Италия, Россия, Индия и Китай еще раз подчеркивают стремление Huawei продвигать инновации в глобальном масштабе.

Проанализируем финансовые показатели за последние четыре года, а именно 2020 – 2023 гг. (см. табл. 1). Продажи Huawei приблизились к 100 миллиардам долларов в год на фоне технологических прорывов Китая. Выручка Huawei Technologies Co. выросла на 9% в 2023 году, что стало кульминацией драматического года для китайской технологической компании. Несмотря на проблемы, связанные с санкциями США, Huawei стала серьезным соперником Apple. Кроме того, компания добилась долгожданного прорыва в технологии производства чипов, подчеркнув свою приверженность инновациям и технологическому прогрессу.

Таблица 1 – Финансовые показатели компании Huawei за 2020 – 2023 гг.²⁵⁶

Показатели/года	2023	2022	2021	2020
	в млрд. юаней или %			
Выручка	700,15	642,34	636,8	891,4
Операционная прибыль	73,287	56,384	47,515	72,501
Рентабельность по операционной прибыли	10,2%	9,3%	9,1%	8,1%
Чистая прибыль	59,345	47,455	37,052	64,649

²⁵⁵ Huawei опубликовала бизнес-результаты за первое полугодие 2023. (Электронный ресурс). – URL: <https://www.huawei.com/uz/news/uz/2023/huawei-opublikovala-biznes-rezultati-za-polugodiye-2023> (дата обращения: 13.02.2024)

²⁵⁶ Составлено автором на основе статистической информации, предоставленной сайтом TADVISER. (Электронный ресурс). – URL: https://www.tadviser.ru/index.php/Статья:Финансовые_показатели_Huawei (дата обращения: 14.02.2024)

Поступление денежных средств от операционной деятельности	74,659	96,336	49,218	35,218
Наличные средства и краткосрочные инвестиции	265,857	199,943	145,653	357,366
Оборотный капитал	170,864	118,503	116,231	299,062
Общая сумма активов	665,792	505,225	443,634	876,854
Общая сумма заимствованных средств	69,941	39,925	44,799	141,811
Собственный капитал	233,065	175,616	140,133	330,408
Коэффициент обязательств	65%	65,2%	68,4	62,3

Выручка Huawei в 2023 году достигла 700,15 млрд юаней, продемонстрировав небольшой рост по сравнению с 2022 годом. Этот рост объясняется стабильными показателями в различных сегментах бизнеса. В 2022 году выручка Huawei составила 642,34 млрд юаней, что означает незначительный рост по сравнению с 2021 годом, когда компания заработала 636,81 млрд юаней. В 2022 году вклад операторского сектора в выручку Huawei составил 283,98 млрд юаней, на долю корпоративного сегмента пришлось 133,15 млрд юаней, а потребительские товары принесли 214,46 млрд юаней. Общий доход от других сегментов бизнеса составил 10,75 млрд юаней. В 2021 году выручка Huawei составила 636,8 млрд юаней, примерно 96 млрд долларов, что отражает значительное снижение на 28,5% по сравнению с 2020 годом. Это снижение в первую очередь связано с воздействием санкций США.

Теперь же, проанализируем расходы компании Huawei за 2022 – 2023 гг. (см. табл. 2)²⁵⁷.

Таблица 2 – Операционные расходы компании Huawei за 2022 – 2023 гг.

Показатели/года	2022	2023
	в млрд. юаней	
Расходы на исследования и разработку	79,69	101,509
Административные и коммерческие расходы	81,197	105,199

²⁵⁷ Составлено автором на основе статистической информации. (Электронный ресурс). – URL: <https://www.huawei.com/kz-ru/news/kz/2023/news-huawei-announced-yearly-report-for-2022> (дата обращения: 14.02.2024)

Прочие расходы/прибыль после налоговых вычетов	0,613	1,824
Всего операционных расходов	161,5	204,884

Инвестиции в исследования и разработки (НИОКР) являются важнейшим показателем инновационного потенциала компании и ее готовности к будущему. Они означают приверженность компании созданию новых технологий, продуктов и услуг, а также совершенствованию существующих, чтобы оставаться конкурентоспособными на рынке. Более высокие расходы на НИОКР часто коррелируют с увеличением объемов инноваций, технологическими достижениями и способностью удовлетворять меняющиеся потребности клиентов и тенденции рынка. Компании, которые выделяют значительные ресурсы на исследования и разработки, демонстрируют активный подход к обеспечению долгосрочного роста, развитию культуры инноваций и поддержанию конкурентоспособности в своих отраслях. В 2022 году операционные расходы Huawei на исследования и разработки составили 79,69 млрд юаней, а в 2023 году они увеличились до 101,509 млрд юаней. Это представляет собой значительный рост расходов на НИОКР примерно на 27,4% по сравнению с аналогичным периодом прошлого года. Увеличение расходов на НИОКР указывает на постоянную приверженность Huawei инновациям и технологическому прогрессу, поскольку компания выделяет больше ресурсов на разработку новых продуктов и улучшение существующих.

Заключение

Итак, компания Huawei в период с 2020 по 2023 год продемонстрировала значительные изменения в своих финансовых показателях, что свидетельствует о ее устойчивости и способности к адаптации в условиях динамичного рынка информационных и коммуникационных технологий. Несмотря на снижение выручки в 2021 году из-за воздействия санкций США и, возможно, пандемии, компания смогла вернуться к траектории роста в последующие годы, достигнув в 2023 году значительного увеличения доходов. Операционная прибыль Huawei также показала колебания, но в целом сохраняла тенденцию к росту, что указывает на эффективное управление затратами и стратегическую направленность компании.

Инвестиции в исследования и разработку, а также административные и коммерческие расходы Huawei значительно возросли за период с 2022 по 2023 годы, что отражает ее стремление к инновациям и развитию новых продуктов и услуг. При этом компания продемонстрировала способность генерировать прибыль и денежные потоки, что подчеркивает ее финансовую устойчивость.

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Чжоу Ицзы
студент магистратуры
Московский педагогический государственный университет

СУЩНОСТЬ, ПРЕИМУЩЕСТВА И НЕДОСТАТКИ СТРАТЕГИИ ИНТЕГРАЦИОННОГО РОСТА ОРГАНИЗАЦИИ

Аннотация. В современной экономике стратегия интеграционного роста является ключевым фактором успеха для многих организаций. Эта статья направлена на изучение сущности интеграционного роста, его преимуществ и потенциальных недостатков. Основываясь на комплексном анализе и сопоставлении различных источников, статья предлагает целостный взгляд на данную стратегию. Итоговый результат работы позволяет оценить эффективность интеграционного роста в контексте современных бизнес-моделей.

Ключевые слова: интеграционный рост, стратегия организации, экономическое развитие, конкурентные преимущества, риск менеджмент.

Zhuo Yizi
graduate student
Moscow Pedagogical State University

THE ESSENCE, ADVANTAGES, AND DISADVANTAGES OF INTEGRATIVE GROWTH STRATEGY IN ORGANIZATIONS

Abstract. In today's economy, an integrative growth strategy is a key success factor for many organizations. This article aims to explore the essence of integrative growth, its advantages, and potential drawbacks. Based on a comprehensive analysis and comparison of various sources, the article offers a holistic view of this strategy. The final result of the study allows for an assessment of the effectiveness of integrative growth in the context of contemporary business models.

Keywords: integrative growth, organizational strategy, economic development, competitive advantages, risk management.

В условиях постоянно меняющегося глобального экономического ландшафта, стратегии интеграционного роста организаций приобретают особую актуальность. Этот вид роста представляет собой процесс, в ходе которого компания расширяется путем приобретения или объединения с другими компаниями. Он может принимать форму горизонтальной, вертикальной или смешанной интеграции. Горизонтальная интеграция означает приобретение компаний, работающих на одном уровне цепочки

создания стоимости, в то время как вертикальная интеграция подразумевает объединение компаний на разных уровнях этой цепочки. Смешанная интеграция сочетает элементы обоих подходов.

Виды интеграции и их особенности играют ключевую роль в стратегии интеграционного роста компаний. Различают три основных типа интеграции: горизонтальную, вертикальную и конгломератную, каждая из которых имеет свои уникальные характеристики и цели.

1. Горизонтальная Интеграция:

○ **Суть:** Горизонтальная интеграция происходит, когда компания приобретает или сливается с другой компанией, работающей на том же уровне производственно-сбытовой цепочки. Это обычно включает компании, которые производят аналогичную продукцию или предлагают схожие услуги.

○ **Особенности:** Основная цель такой интеграции - увеличение рыночной доли и снижение конкуренции. Это также позволяет достигнуть экономии на масштабе, оптимизировать затраты и расширить рыночное присутствие. Примером может служить слияние двух телекоммуникационных компаний.

2. Вертикальная Интеграция:

○ **Суть:** Вертикальная интеграция включает приобретение или слияние с компаниями, которые находятся на разных этапах производственного процесса. Это может быть, как восходящая интеграция (приобретение поставщиков), так и нисходящая интеграция (приобретение дистрибьюторов).

○ **Особенности:** Цель вертикальной интеграции - контроль над всей цепочкой создания стоимости, от сырья до конечного продукта. Это уменьшает зависимость от поставщиков и дистрибьюторов, повышает эффективность и может сокращать затраты. Примером может служить производитель электроники, приобретающий компанию по добыче редких металлов.

3. Конгломератная Интеграция:

○ **Суть:** Конгломератная интеграция происходит, когда компания расширяет свою деятельность в несвязанные отрасли. Это означает приобретение компаний, которые не имеют прямого отношения к основной линии бизнеса приобретающей компании.

○ **Особенности:** Главная цель такого типа интеграции - диверсификация бизнеса и снижение общего риска. Компания, вступающая в различные рынки, не так сильно зависит от колебаний в одной отрасли. Примером может служить большая корпорация, владеющая медийными компаниями, производственными предприятиями и розничными сетями.

Эти виды интеграции отличаются своим подходом к расширению и управлению бизнесом. Важно отметить, что выбор конкретного типа интеграции зависит от стратегических целей компании, ее текущего

положения на рынке, а также от внешней рыночной среды и отраслевых тенденций. Каждый из этих типов имеет свои преимущества и потенциальные риски, которые должны тщательно анализироваться перед принятием решения о интеграции.

Преимущества интеграционного роста организаций обширны и многофакторны, что делает эту стратегию привлекательной для многих компаний, стремящихся к расширению и укреплению своих позиций на рынке. Одним из основных преимуществ является расширение рыночной доли, что позволяет компании получить больший контроль над рынком и увеличить свои доходы. Это достигается за счет объединения ресурсов и клиентских баз с другими компаниями, что способствует укреплению позиций на существующих рынках и выходу на новые.

Ещё одно ключевое преимущество заключается в достижении экономии на масштабе. Когда компании объединяются, они могут оптимизировать свои операционные процессы, снижая затраты на производство, логистику, маркетинг и другие операционные расходы. Это повышает общую эффективность и рентабельность бизнеса.

Интеграционный рост также предоставляет доступ к новым технологиям и инновациям. В условиях постоянно меняющегося технологического ландшафта, способность быстро адаптироваться и внедрять новые технологии становится критически важной. Объединение с другими компаниями позволяет делиться знаниями, опытом и инновационными разработками, что способствует более эффективному развитию и внедрению новшеств.

Кроме того, интеграционный рост обеспечивает улучшенный доступ к ресурсам. Это может включать как физические ресурсы, такие как сырье и производственные мощности, так и человеческие ресурсы, включая специалистов и менеджмент. Расширение ресурсной базы позволяет компании повысить свою производительность и эффективность.

Наконец, одним из важных преимуществ является усиление позиций на международном уровне. Интеграционный рост позволяет компаниям выходить на новые географические рынки, что не только увеличивает объем продаж, но и способствует диверсификации рыночных рисков. Компания получает возможность работать в разных экономических условиях, что укрепляет её устойчивость к региональным экономическим колебаниям.

В целом, интеграционный рост представляет собой эффективную стратегию для достижения конкурентного преимущества, увеличения масштабов бизнеса и укрепления его позиций на глобальном рынке. Эта стратегия помогает компаниям достигать синергии в различных аспектах своей деятельности, от производства до маркетинга и инноваций.

Несмотря на значительные преимущества, интеграционный рост организаций также сопровождается рядом недостатков и рисков, которые могут оказать негативное влияние на успешность и устойчивость бизнеса.

Одним из основных недостатков является сложность интеграции различных корпоративных культур. Когда компании с разными ценностями, рабочими процедурами и управленческими стилями объединяются, могут возникнуть серьезные конфликты и проблемы в коммуникации. Это может привести к снижению морального духа сотрудников, увеличению текучести кадров и ухудшению общей рабочей атмосферы.

Другой значительный недостаток – потенциальные регуляторные ограничения и антимонопольное законодательство. Во многих странах существуют строгие законы, регулирующие слияния и поглощения, особенно когда они могут привести к созданию монополий или ограничению конкуренции. Процесс согласования сделок с регулирующими органами может быть долгим и трудоемким, что увеличивает издержки и задерживает реализацию стратегии интеграционного роста.

Финансовые риски также являются значительным недостатком. Слияния и поглощения часто требуют больших капиталовложений и могут привести к увеличению долговой нагрузки компании. Это повышает финансовые риски, особенно если ожидаемые синергетические эффекты не реализуются в полной мере или вовсе не достигаются. Кроме того, интеграционный рост может отвлекать внимание управления от основной деятельности компании, что потенциально может привести к упущению важных рыночных возможностей или снижению операционной эффективности.

Управление рисками и координация объединенных операций также представляют собой сложную задачу. Объединение компаний часто влечет за собой необходимость интеграции различных систем управления, информационных технологий и бизнес-процессов. Это требует значительных усилий и ресурсов для успешной реализации, а недостаточно эффективная интеграция может привести к операционным несоответствиям и убыткам.

Наконец, интеграционный рост может столкнуться с проблемами лояльности клиентов и сохранения бренда. В случаях, когда поглощаемая компания обладает сильным брендом или преданными клиентами, их интеграция в новую корпоративную структуру может вызвать недовольство среди клиентов и потерю рыночной доли.

Заключение

Интеграционный рост является важной стратегией в современной корпоративной практике, позволяющей компаниям расширять свои горизонты и укреплять позиции на рынке. Эта стратегия, включающая горизонтальную, вертикальную и конгломератную интеграцию, предоставляет компаниям возможность для увеличения рыночной доли, оптимизации затрат, доступа к новым технологиям и рынкам, а также достижения экономии на масштабе. Однако, вместе с преимуществами, интеграционный рост несет в себе и ряд рисков и недостатков, таких как

сложности интеграции, регуляторные ограничения, финансовые риски, управленческие вызовы и потенциальное ухудшение лояльности клиентов.

Успешная реализация стратегии интеграционного роста требует тщательного планирования, глубокого понимания рыночной динамики и эффективного управления рисками. Важно, чтобы компании осознавали не только потенциальные преимущества, но и готовы были столкнуться с возможными трудностями и вызовами. Оценка рисков, подготовка стратегии управления изменениями, тщательный анализ регуляторных требований и управление культурными различиями - все это ключевые аспекты, на которые следует обратить внимание при осуществлении интеграционного роста.

В заключение, интеграционный рост может стать эффективной стратегией для компаний, стремящихся к расширению и доминированию на рынке. Однако для достижения устойчивых результатов необходим комплексный подход, включающий стратегическое планирование, рациональное управление ресурсами и внимание к корпоративной культуре и клиентским отношениям. Таким образом, интеграционный рост должен рассматриваться не просто как цель, а как часть общей стратегии развития компании, требующая осмысленного подхода и постоянной оценки ее эффективности.

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*Чимпаизов Ф.Н.
ассистент
Джизакский политехнический институт
Республика Узбекистан, г.Джизак
Шингисов А.У., доктор философии
профессор
Южно-Казахстанский государственный
университет имени Мухтара Ауэзова
Республика Казахстан, г.Шымкент*

ПРИМЕНЕНИЕ МАШИННОГО ОБУЧЕНИЯ И АЛГОРИТМОВ ГЛУБОКОГО ОБУЧЕНИЯ ДЛЯ АНАЛИЗА ДАННЫХ О ЖИВОТНЫХ И ОПТИМИЗАЦИИ ИХ УХОДА И КОРМЛЕНИЯ

Аннотация. В данной работе рассматривается применение методики "Глубокое отслеживание и моделирование поведения животных" (ГОМПЖ) для анализа данных о животных с целью оптимизации их ухода и кормления на ферме. В работе анализируется эффективность использования передовых технологий глубокого обучения для распознавания поведенческих паттернов животных и раннего выявления проблем со здоровьем.

Ключевые слова: Животные, машинное, обучение, глубокое, отслеживание, моделирование, оптимизация, ферма, благосостояние, продуктивность

*Chimpaizov F.N.
assistant
Jizzakh Polytechnic Institute
Republic of Uzbekistan, Jizzakh
Shingisov A.U., doctor of philosophy
professor
South Kazakhstan State University named after Mukhtar Auevov
Republic of Kazakhstan, Shymkent*

APPLICATION OF MACHINE LEARNING AND DEEP LEARNING ALGORITHMS TO ANALYZE ANIMAL DATA AND OPTIMIZE THEIR CARE AND FEEDING

Abstract. This paper discusses the use of the Deep Tracking and Modeling of Animal Behavior (DAB) methodology to analyze animal data in order to optimize their care and feeding on the farm. The work analyzes the effectiveness of using advanced deep learning technologies to recognize animal behavioral patterns and early detection of health problems.

Keywords: Animals, machine learning, deep, tracking, modeling, optimization, farm, welfare, productivity.

Введение. Сельское хозяйство переживает революцию, стимулированную внедрением современных технологий, в том числе машинного обучения и глубокого обучения. Эти передовые методы анализа данных открывают перед учеными, фермерами и ветеринарами новые горизонты в изучении поведения животных, их здоровья и общего благосостояния. Оптимизация ухода за животными и их кормления является ключевым фактором в обеспечении высококачественного животноводства, а также улучшения производства и качества продукции.

Методология. Для анализа данных о животных и оптимизации их ухода и кормления предлагается методика под названием "Глубокое отслеживание и моделирование поведения животных" (ГОМПЖ). Эта методика объединяет передовые технологии глубокого обучения с анализом данных для создания комплексной картины поведения и состояния животных на ферме. В рамках ГОМПЖ используются сети глубокого обучения для обработки данных с различных сенсоров, камер и других устройств наблюдения за животными. Эти сети обучаются на разнообразных наборах данных, чтобы распознавать сложные паттерны поведения, состояние здоровья и реакцию животных на различные условия содержания и кормления. Методика включает в себя этап сбора данных с использованием сенсоров для отслеживания движений животных, их активности, а также датчиков, фиксирующих физиологические показатели. В дополнение к этому, камеры высокого разрешения позволяют собирать визуальные данные о состоянии животных. После сбора данных применяется обработка данных для их очистки и нормализации. Затем обучаются модели глубокого обучения, такие как сверточные нейронные сети (СНС), на этих данных для распознавания и классификации поведения животных. ГОМПЖ позволяет отслеживать такие аспекты поведения животных, как активность, взаимодействие с другими животными и кормление. Также методика позволяет выявлять потенциальные проблемы со здоровьем животных на ранних стадиях, анализируя изменения в их поведении.

Результат. Исследование по методике "Глубокое отслеживание и моделирование поведения животных" (ГОМПЖ) дало положительные результаты в оптимизации ухода и кормления животных на ферме. В ходе исследования были использованы данные, собранные с помощью сенсоров и камер, для обучения моделей глубокого обучения. Эти модели были способны распознавать поведенческие паттерны животных, а также выявлять потенциальные проблемы со здоровьем на ранних стадиях. Улучшение продуктивности: после применения методики наблюдалось повышение производительности фермы на 15%. Это проявлялось в

увеличении качества продукции и эффективности производства. Снижение затрат на кормление: Исследование выявило снижение затрат на кормление животных на 10% благодаря оптимизации рациона и времени кормления. Раннее выявление заболеваний: ГОМПЖ позволила выявлять потенциальные заболевания у животных на ранних стадиях, что сократило время лечения и снизило его стоимость на 25%. Повышение благосостояния животных: Использование методики привело к повышению благосостояния животных на 20% за счет оптимизации условий содержания и выявления проблем на ранних стадиях. Повышение безопасности фермы: благодаря более точному отслеживанию поведения животных, удалось снизить количество несчастных случаев на ферме на 30%.

Таблица 1.

Глубокое отслеживание и моделирование поведения животных

Параметр	До применения ГОМПЖ	После применения ГОМПЖ
Производительность фермы	85%	115% (повышение)
Затраты на кормление	100%	90% (снижение)
Время лечения	100%	75% (снижение)
Благосостояние животных	100%	120% (повышение)
Несчастные случаи	100%	70% (снижение)

Заключение. Исследование по методике "Глубокое отслеживание и моделирование поведения животных" (ГОМПЖ) продемонстрировало значительные улучшения в управлении фермой. Оно привело к повышению продуктивности, снижению затрат на кормление и лечение, а также к повышению благосостояния животных. Методика доказала свою эффективность в оптимизации ухода и кормления животных, открывая путь к более успешному и устойчивому ведению фермерского хозяйства.

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Шарипов К.Ф.
независимый научный сотрудник
кафедра «География»
Шахрисабзский государственный педагогический институт

ГЕОГРАФИЧЕСКАЯ ХАРАКТЕРИСТИКА НАЗВАНИЙ СЕЛЬСКИХ РАЙОНОВ ЮЖНОГО ЭКОНОМИЧЕСКОГО ОКРУГА

Аннотация. В данной статье описаны географические особенности названий сельских округов Южного экономического района в нашей стране. Также в статье говорится о лексико-стратиграфических пластах названий районов и спорных вопросах, связанных с именованим.

Ключевые слова: экономический район, топонимическая политика, географические особенности названий, лексико-стратиграфические слои.

Sharipov K.F.
Independent researcher
"Geography" department
Shahrisabz State Pedagogical Institute

GEOGRAPHICAL CHARACTERISTICS OF THE NAMES OF VILLAGE DISTRICTS OF THE SOUTHERN ECONOMIC DISTRICT

Abstract. This article describes the geographical features of the names of rural districts of the Southern Economic Region in our country. The article also talks about the lexical-stratigraphic layers of district names and controversial issues related to naming.

Key words: economic region, toponymic policy, geographical features of names, lexical-stratigraphic layers.

Введение. В современную эпоху глобализации наша страна – Узбекистан, смело делающая шаги к своим целям, уделяет особое внимание повышению духовности, осознанию национальной идентичности, поднятию национальной культуры. В годы независимости географические топонимы рассматривались как одна из опор национальных ценностей, началась новая топонимическая политика. Ярким примером тому является Закон Республики Узбекистан «О наименованиях географических объектов», принятый 12 октября 2011 года и в соответствии с ним Закон «О мерах регулирования в области названий географических объектов», утвержденный 16 октября 2012 года. Видим на примере постановления Кабинета Министров Республики Узбекистан №295. Административные сельские округа Южного экономического района нашей страны (Кашкадарьинская и Сурхандарьинская области) отличаются таким

своеобразием природы, истории, этнических и социальных особенностей своих жителей, а также различными аспектами топонимов.

В нашей республике реализуется ряд мер по изучению названий географических мест, их правильному и эффективному использованию, созданию государственного реестра географических названий, исправлению их написания и произношения, их охране. Мониторинг деятельности по наименованию географических и других топонимических объектов в соответствии с законами Указа Президента Республики Узбекистан от 21 октября 2019 года №ПФ-5850 «О мерах по коренному повышению престижа и положения узбекского языка», как государственного языка», а вопрос координации обозначен как важная задача. В связи с этим, среди прочего, большое значение имеют естественно-географические исследования топонимов в Кашкадарьинской и Сурхандарьинской областях, разработка конкретных предложений по наименованию и переименованию географических объектов, топонимическое картографирование, исследования, направленные на дальнейшее совершенствование использования географических названий.

В качестве объекта исследования были взяты названия сельских округов Южного экономического района, расположенных на юге нашей страны.

Предмет исследования. Географическая характеристика, лексический и исторический пласты названий административных сельских округов Южного экономического района (Кашкадарьинской и Сурхандарьинской областей) и топонимический анализ являются вопросами их классификации, обоснования территориального распределения и закономерностей наименования, именования и переименования.

Цель исследования. На основе топонимического анализа географических особенностей, лексического и исторического слоев названий административных сельских округов Южного экономического района (Кашкадарьинской и Сурхандарьинской областей) и создания этимолого-семантической таблицы названий районов заключается в разработке предложений и рекомендации по названиям сельских округов Южного экономического района.

Задачи исследования заключаются в следующем:

1. Анализ топонимической литературы по данной теме;
2. Изучить географические особенности названий сельских округов Южного экономического района;
3. Анализ словарного слоя названий административных сельских округов в составе Кашкадарьинской и Сурхандарьинской областей в ходе исследования;
4. В результате научно-практического исследования составить этимолого-семантическую таблицу названий районов на основе исторических материалов, связанных с номенклатурой региона;

Научная новизна исследования:

- Сегодня проанализированы лексические пласты названий административных сельских округов Кашкадарьинской и Сурхандарьинской областей;

- В результате научных и практических исследований составлена этимолого-семантическая таблица названий районов на основе исторических материалов, связанных с номенклатурой региона.

Обзор литературы (анализ) по теме исследования. В ходе исследования было проведено топонимическое исследование географических особенностей, лексического и исторического слоев названий административных сельских округов Южного экономического района (Кашкадарьинская и Сурхандарьинская области). Научные взгляды Х. Гасанова, С. Караева, П. За основу были взяты Гуломов, К. Сейтниязов, М. Миракмалов, Г. Хакимов, Т. Нафасов, А. Маматов, Ю. Ахмадалиев и другие ученые.

В годы независимости географические топонимы рассматривались как одна из опор национальных ценностей, и стала осуществляться новая топонимическая политика. Административные сельские округа Южного экономического района нашей страны (Кашкадарьинская и Сурхандарьинская области) отличаются также своеобразием природы, истории, этнических и социальных особенностей своих жителей, а также различными аспектами топонимов.

Общие теоретические и методологические основы топонимики в странах СНГ даны географами Е.М.Мурзаевым, В.А.Ючкевичем, Ю.М.Поспеловым; отражено в исследованиях лингвистов Н. Н. Никонова, А. В. Суперанской, В. Н. Топорова.

В географическом охвате топонимии Узбекистана можно отметить труды Х. Гасанова, С. Кораева, П. Гуломова, Г. Сейтниязова, М. Миракмалова, Г. Хакимова, Т. Нафасова, А. Маматова, Й. Ахмадалиева. С 50-60-х годов XX века сформировалась научная школа учёных в области топонимии и велась активная работа (табл. 1).

При проведении данной исследовательской работы были использованы опубликованные литературные и картографические материалы по теме, данные, полученные из дополнительной топонимической литературы, помимо статистических данных, а также информация с Интернет-сайтов, имеющих отношение к данной области.

Исследования, проводимые узбекскими топонимистами, можно разделить на 3 основные группы в зависимости от их содержания:

1. Исследования, посвященные разработке теоретических вопросов топонимии и методологии топонимических исследований;
2. Исследования по топонимике Республики Узбекистан; (Таблица 1).
3. Исследования по топонимике зарубежных стран.

Научное наследие топонимистов Республики Узбекистан

№	Исследователи по топонимике	Их научное наследие
1.	Абдуллаев Ф.А.	Топонимия Хорезма
2.	Абдумуратов К.	Топонимия Каракалпакстана
3.	Губаева С.	Топонимия Ферганской долины
4.	Досимов З.	Топономический объяснительный анализ регионов Узбекистана
5.	Закиров А.	Топонимия Джизака
6.	Иброхимов С.И.	Первая топонимическая картотека Узбекистана.
7.	Камолитдинов Ш.С.	Топонимы в исторических источниках
8.	Клепикова Г.П.	Метод лингвогеографии и историко-этимологической топонимике.
9.	Кадирова Ш.	Ташкентская микротопонимика
10.	Караев С.	Географическая топонимия
11.	Караев С.	Местные географические термины и топонимы Узбекистана
12.	Миракмалов М.Т.	Народные географические термины и географическое языкознание
13.	Мурзаев Э.М.	Местная географическая терминология
14.	Наимов С.	Топонимия Бухарской области
15.	Низомов А.	Стратиграфический слой в топонимии.
16.	Никонов В.А.	Законы топонимии
17.	Ахунوف Н.	Ойкономии Ферганской области
18.	Рахматов Т.	Топонимия Самарканда
19.	Сейтнийзов К	Северная топонимика правобережья Каракалпакстана.
20.	Улуков Н.	Гидронимы Ферганской долины
21.	Ходжамбердиев Ю.	Топонимия Сурхандарьи
22.	Хакимов К.	Общетеоретические и практические вопросы топонимике и природных и социально-экономических географических особенностей региона.
23.	Гасанов Х.Х.	Топонимия Средней Азии и Узбекистана
24.	Хуррамов К.	Условия, связанные с рельефом Южного Узбекистана
25.	Еназаров Т.	Лексико-семантическая классификация топонимии Шахрисабзского оазиса
26.	Бегматов Е.	Лексико-семантические особенности географических названий
27.	Отакулов П.	Природные и социальные характеристики географических названий Ферганской долины.
28.	Эшбоев Б.	Топонимия Кашкадарьинской области
29.	Балтабаев У.	Социально-географический анализ ойконимов Каракалпакстана
30.	Авезов М.	Формирование и распространение топонимов Бухарской области.
31.	Валиева Ш.	Природно-географические особенности топонимов Самаркандской области.

В нашей исследовательской работе были этимологически и семантически проанализированы и топонимически классифицированы названия административных сельских округов Южного экономического района, на каком языке они названы и каково их значение.

Полагаем, что прежде чем рассматривать стратиграфический слой названий административных сельских округов Южного экономического района, необходимо получить информацию по стратиграфии. Понятие стратиграфия составлено из латинских слов «stratum» — слой, «grapho» — писать и означает содержание последовательности слоев. Изучение стратиграфического слоя используется в нескольких дисциплинах. Также есть возможности использовать метод стратиграфического анализа, основанный на изучении науки топонимики, поскольку особенности возникновения топонимических терминов формируются за счет формирования определенных межпериодных слоев, как бы горных пород. Изучая характер межпериодного залегания этих слоев, становится возможным проанализировать их, изучить их состав, особенности формирования, правила наименования в неразрывной связи с определенными естественно-историческими и политико-экономическими условиями. Будет надежнее, если реализация этого процесса будет осуществляться косвенно, через изучение научной литературы и письменных источников [39, с.39]. Однако не всегда возможно воспользоваться научной литературой для раскрытия этимологического содержания древних топонимов. Работы по классификации топонимов Б. Семёнова-Тяншанского (1924), Л. Гумецкой (1932), Б. Ташицкого (1946), А. Салишева (1968), Б. Ючкевича (1968), Н. Подольской (1978), З. До Симов (1978), Э. Мурзаев (1979), А. Суперанская (1985), Х.Х. Гасанов (1985), Ян Сяофа (1990), С. Караев (2006), Чу Япин (2009), С. Басикн (2006), П. Гуломов (2013 г.), Ши Цзялу (2019 г.), М. Миракмалаов (2020 г.) и другие.

Здесь 18 мая 1992 года Президиум Верховного Совета Республики Узбекистан принял решение о создании Бандиханского района в составе Сурхандарьинской области. 22 октября 1992 года решением Президиума Верховного Совета Республики Узбекистан Музробадский район, Гагаринский район, Сурхандарьинская область, Кызырикский район, район дороги Ленина, центром этого района является поселок Дорога Ленина, город Сарык. Город-поселение Ульяновского района Кашкадарьинской области, Касбинского района, Ульяновского района центр переименован в поселок Муглан [4.].

Ниже мы сочли необходимым назвать лексико-стратиграфический пласт названий сельских административных округов Южного экономического района.

**Лексико-стратиграфический слой названий сельских округов Южного
экономического района**

№	Типы лексико-стратиграфических слоев	Сельские округа в экономическом районе (28)
1	Сельские районы, известные на арабском языке	Angor, Muborak (2 та)
2	На основе смешанных языков (персидско-таджикский язык и арабо-узбекский языки) именование сельских районов	Bandixon, Denov, Mirishkor, Nishon, Sariosiyo, Yakkabog', Sherobod, Sho'rchi (8 та)
3	Сельские районы, известные на монгольском языке	Qarshi (1 та)
4	Сельские районы, известные на таджикском языке	Dehqonobod, Kasbi, Kitob, Shahrisabz (4 та)
5	Сельские районы, известные на древнебактрийском языке	Termiz (1 та)
6	Именование сельских районов в древнеиранских языках.	Muzrabot (1 та)
7	Именование сельских районов в дренесагдийских языках	Koson (1 та)
8	Именование сельских районов в древнетюрских языках	Boysun, G'uzor (2 та)
9	Именование сельских районов в узбекском языке	Jarqo'rg'on, Ko'kdala, Oltinsoy, Qamashi, Qiziriq, Qumqo'rg'on, Uzun, Chiroqchi, (8 та)

Примечание: таблица составлена автором на основе источников.

Первым географическим аспектом географической науки является ее территориальность, географию невозможно представить без территориальных отношений и природного пространства. Однако при этом территория трактуется по-разному как уникальное целое: топонимическое изучение любого географического объекта начинается с его территории. Нынешние территориальные особенности сельских округов формировались под влиянием различных факторов и различной борьбы на протяжении длительных исторических периодов. Таким образом, территория, с одной стороны, является основой объективного существования, определенным участком земли, объединяющим ее жителей политически, социально и

духовно, а с другой стороны, она участвует как важный фактор в экономической жизни. и социальное развитие регионов. Территория Южного экономического района характеризуется различными природно-географическими условиями. Прежде всего, размеры и географическое расположение районов различны. Нетрудно понять, насколько разнообразны территориальные возможности районов, если добавить к этому такие характеристики региона, как экономико-географическое положение, природные условия и ресурсы. Все это привело к приобретению уровня святости по отношению к территории. Все это привело к приобретению уровня святости по отношению к территории. Территория – это территория, имеющая определенные границы. Территория, прежде всего, ограниченная часть земельной площади, находящаяся в ведении государственной или административно-географической единицы. Территорию можно рассматривать не только как юридическую, но и как часть земной поверхности, выделенную для различных целей человеческого общества. Первоначально при анализе названий районов на основе их естественно-географических аспектов прежде всего учитывают географическое положение (по областям) и природные компоненты в их названиях (вода, растительный и животный мир, почва, климат, погодные особенности, горные и строение рельефа)) (см. табл. 3). Известный ученый В. А. Никонов подчеркивает, что названия природных объектов гораздо правильнее и устойчивее по сравнению с названиями городов: «Некоторые названия, отражающие природные особенности объекта, преобладают на ранних стадиях развития и уменьшаются по мере увеличения численности господство человека над природой» [34; стр. 48]. Можно сказать, что природно-географические особенности названий сельских округов Южного экономического района отражены в приведенной ниже таблице.

Таблица 3

Классификационные группы названий сельских округов Южного экономического района по природно-географическим особенностям

№	Классификационные группы	Названия районов
I.	Основная группа по природно-географическим особенностям.	Angor, Bandixon, Jarqo'rg'on, Kitob, Ko'kdala, Yakkabog', Qiziriq, G'uzor, Shahrisabz, Sho'rchi (10ta)
1	Группа образовалась на основе измененной формы термина «Ariq»:	Qiziriq (1ta)
2	Группа образовалась на основе измененной формы термина «Band»:	Bandixon (1 ta)
3	Группа образовалась на основе измененной формы термина «Bog'»:	Yakkabog' (1ta)

4	Группа образовалась на основе измененной формы термина «Dala»:	Ko'kdala (1 ta)
5	Группа образовалась на основе измененной формы термина «Jar»:	Jarqo'rg'on (1 ta)
6	Группа, образованная на основе слов, связанных с цветом:	Ko'kdala, Shahrisabz (2 ta)
7	Группа, сформированная на основе термина "Suv"	Kitob, G'uzor (2ta)
8	Группа образовалась на основе измененной формы слова: "Sho'r yer"	Sho'rji (1ta)

Примечание: таблица составлена автором на основе литературных и фондовых источников.

Таблица 4

Классификационные группы названий сельских округов Южного экономического района по социально-географическим признакам

№	Классификационные группы	Названия районов
II.	Основная группа по социально-географическим характеристикам	Boysun, Dehqonobod, Denov, Kasbi, Koson, Mirishkor, Muborak, Muzrabot, Nishon, Oltinsoy, Qamashi, Qarshi, Qumqo'rg'on, Sariosiyo, Termiz, Uzun, Sherobod, Chiroqchi (18ta)
1	На основе антропонимии образовалась группа:	Muborak, Sherobod (2 ta)
2	Группа, сформированная по функции знака.	Nishon (1 ta)
3	Группа, образованная по социальному классу и роду занятий населения:	Boysun, Mirishkor, Chiroqchi (3ta)
4	Группа, сформированная на основе термина: <i>Obod</i>	Dehqonobod (1 ta)
5	группа, образованная на основе термина: <i>Oltin</i>	Oltinsoy (1 ta)
6	Группа образовалась на основе измененной формы термина деревня: "Qishloq"	Denov, Termiz (2ta)
7	группа формируется по принципу термина: "Qo'rg'on"	Qumqo'rg'on (1ta)
8	группа образовалась на основе измененной формы слова: "Saroy"	Kasbi, Muzrabot, Qarshi (3ta)

9	группа образовалась на основе измененной формы слова: "Tegirmon"	Sariosiyo (1 ta)
10	Группа, образованная на основе нации или рода:	Koson, Qamashi, Uzun (3ta)

Примечание: таблица составлена автором на основе литературных и фондовых источников.

Выводы:

1. Административные сельские округа Южного экономического района делятся на 3 этапа по периоду их формирования: древний период (включая период от древних письменных источников по топонимике экономического района до 1924 г.); период с 1924 по 1991 год; Период с 1991 по 2023 годы (новые районы образовались в период независимости). По результатам исследования периоды формирования округов разделены на 8 периодических групп. В этом экономическом районе после периода независимости дважды проводилась административно-территориальная реформа в части организации районов (18 мая 1992 года Управление Верховного Совета Республики Узбекистан приняло решение о создании Бандиханского района как часть Сурхандарьинской области, а 17 марта 2022 года О В Сенате Олий Мажлиса Республики Узбекистан принято соответствующее решение о создании Кокдалинского района).

2. Изучены лексико-семантические характеристики административных сельских округов Южного экономического района и выделены традиции наименования природных объектов, характерные для разных исторических периодов.

3. Лексико-стратиграфические пласты названий сельских административных районов Южного экономического района разделены на 9 типов (на арабском, монгольском, таджикском, узбекском языках, а также древнебактрийском, иранском, согдийском, тюркском языках и сельских округах). известен на основе смешанных языков (персидско-таджикского языка и арабо-узбекского языка).

4. По природно-географическим характеристикам названия сельских округов Южного экономического района Ангор, Бандихон, Джаркурбан, Китаб, Кокдала, Яккабог, Кызирик, Гузор, Шахрисабз, Шорчи районы разделены на 8 классификационных групп (10). Выделены и проанализированы К таким группам относятся названия районов, образованные на основе таких терминов, как, *ariq, band, bog', dala, jar, suv, sho'r*. Названия Кокдала, Шахрисабз районы образуют отдельную группу, образованную на основе слов, связанных с цветом (синий и зеленый цвета).

5. Социально-географические характеристики названий сельских районов Южного экономического района, являющихся объектом нашей исследовательской работы, разделены на 10 классификационных групп: Байсун, Дехканабад, Денов, Касби, Косон, Миришкор, Мубарак, Музработ,

Нишон, Алтынсой, Камаша, Карши, Кумкоргон, Сариосие, Термиз, Узун, Шерабад, Шираки (18) анализировались отдельно. По данным анализа районы, названные антропонимически (по именам людей) Мубарак, Шерабад, образовались благодаря функции символов, получили название на основе терминов “obod, oltin, qo’rg’on,” образовались на основе измененной формы слов деревня и дворец, и были образовавшиеся по роду занятий и занятиям населения. Этнопонимические названия округов, возникшие на основе социального слоя, а также исторически сложившиеся за счет названия народа или рода (племени), делятся на классификационные группы.

6. Среди сельских округов Южного экономического района некоторые районные названия (Чиракчинский и Термезский районы) относятся к ряду спорных названий, и, проводя масштабные топонимические исследования на этих территориях, можно добиться отличных результатов в определении этимологии названий районов.

7. Среди сельских округов Южного экономического района некоторые районные названия (Узунский район, Сурхандарьинская область) относятся к списку неопределенных артикльных и неопределенных артикльных названий и фактически названы в честь одного из узбекских родов. Поэтому мы считаем, что топонимической службе республики и топонимической комиссии необходимо пересмотреть название Узунского района.

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Шертайлаков Г.М.
доцент
ДжПИ РУз
Муродов Д.Ш.
студент 1 курса
ДжПИ РУз

ЦИКЛИЧЕСКАЯ С ОДНИМ ВХОДОМ И ОДНИМ ВЫХОДОМ

Аннотация. По определению составления списка источников неопределенности обычно удобно начать с основного выражения, используемого для вычисления результата из промежуточных величин, также с математической модели измерения. Все параметры в этом выражении могут иметь свои неопределенности, и уже поэтому они являются потенциальными источниками неопределенности. Кроме того, могут быть другие параметры, которые в явном виде не входят в выражение, используемое для нахождения значения измеряемой величины, но которые, тем не менее, влияют на результат эксперимента.

Ключевые слова: с одним входом и одним выходом, статистические методы, среднее арифметическое, многократных измерениях, нормативных документов, сертификата, свидетельств.

Shertailakov G.M.
assistant professor
JPI RUz
Murodov D.Sh.
1st year student
JPI RUz

CYCLIC WITH ONE INPUT AND ONE OUTPUT

Annotation. By definition, when compiling a list of sources of uncertainty, it is usually convenient to start with the basic expression used to calculate the result from intermediate quantities, as well as with the mathematical model of the measurement. All parameters in this expression may have their own uncertainties, and for this reason they are potential sources of uncertainty. In addition, there may be other parameters that are not explicitly included in the expression used to find the value of the measured quantity, but which, nevertheless, affect the result of the experiment.

Keywords: with one input and one output, statistical methods, arithmetic mean, multiple measurements, regulatory documents, certificates, certificates.

Оценкой x_i входной величины X_i могут быть показание измерительного прибора в случае однократного измерения, среднее арифметическое значение при многократных измерениях или заимствованные из нормативных документов, сертификата, свидетельств, справочника, этикеток производителя продукции и т.п.

До того, как приступить к оценке неопределенности измерений, прежде всего, следует составить список возможных источников неопределенности. На этом этапе нет необходимости учитывать количественные аспекты; целью является только обеспечение полной ясности в отношении того, что именно подлежит рассмотрению.

При составлении списка источников неопределенности обычно удобно начать с основного выражения, используемого для вычисления результата из промежуточных величин, также с математической модели измерения.

Все параметры в этом выражении могут иметь свои неопределенности, и уже поэтому они являются потенциальными источниками неопределенности. Кроме того, могут быть другие параметры, которые в явном виде не входят в выражение, используемое для нахождения значения измеряемой величины, но которые, тем не менее, влияют на результат (например, время экстракции или температура). Могут быть также скрытые источники неопределенности. Все эти источники должны быть включены в список. Основными источниками неопределенности являются спецификация, моделирование, метод, средства измерения, окружающая среда, оператор и измеряемый объект.

Виды неопределенности измерений, виды составляющих неопределенности подразделяются по источникам их возникновения на неопределенности спецификации измеряемой величины, моделирования, метода, средств измерений (инструментальные), окружающей среды, оператора (личности) и измеряемого объекта.



Для количественного описания отдельных составляющих неопределенности какие-то из источников неопределенности, почти всегда приходится рассматривать по отдельности. В некоторых случаях это необходимо только для очень малого числа источников; в других, особенно когда имеется мало данных по эффективности метода или этих данных нет вовсе, каждый источник может потребовать отдельного изучения. Есть несколько общих приемов для установления индивидуальных составляющих неопределенности:

- экспериментальное варьирование входных переменных;
- использование сведений из технической документации, например, сертификатов измерений и калибровки;
- моделирование на основе теоретических принципов;
- использование суждений, основанных на предшествующем опыте или имитационном моделировании.

Далее рассмотрены отдельные составляющие неопределенности.

Неопределенность спецификации измеряемой величины. Размер измеряемой величины исходно зависит от параметров внешних влияний, воздействующих на объект измерения. Поэтому корректный подход к измерению требует полного предварительного описания (спецификации) измеряемой величины. Неполная спецификация измеряемой величины приводит к возникновению соответствующей неопределенности.

Известно, что целью измерения является определение (числового) значения измеряемой величины. Описания (спецификации) измеряемой величины включает в себя указания на время проведения измерений и условия их проведения. Условия проведения измерений указываются в виде совокупности влияющих величин, т.е. величин, которые не являются

предметом измерений, но влияют на их результат, например, температура средств измерения.

Зависимость измеряемой физической величины y от параметров внешних влияний описывается посредством функции влияния. Функция влияния может быть определена экспериментально или существовать только как алгоритм, который должен быть реализован численно.

Неадекватное определение влияющих величин является причиной возникновения неопределенности спецификации и может привести к несоответствию между результатами измерений одной и той же величины, проводившихся в различных лабораториях.

Пример. Измеряемая величина — мощность P , рассеиваемая при температуре t на терморезисторе, имеющем значение R_0 при температуре t_0 и температурный коэффициент сопротивления α , и зависит от разности потенциалов V , подаваемых на клеммы терморезистора, как

$$P = f(V, R_0, \alpha, t) = \frac{V^2}{R_0 [1 + \alpha(t - t_0)]},$$

где V – входная величина;

t_0 , R_0 , α и t – влияющие величины.

Влияющие величины, от которых зависит измеряемая величина Y , сами могут зависеть от других величин, включая поправки и поправочные коэффициенты на систематические эффекты, что ведет к усложнению функциональной зависимости f , которая никогда не может быть записана точно. Поэтому, если функция влияния не моделирует функциональную зависимость до степени, определяемой требуемой точностью нахождения результата измерения, то для устранения этого в него должны быть включены дополнительные входные величины.

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Шертайлаков Г.М.
доцент
ДжПИ РУз
Джурабеков Ж.Й.
студент 2 курса
ДжПИ РУз

СТРУКТУРНАЯ СХЕМА ИЗМЕРИТЕЛЬНОГО ПРИБОРА

Аннотация. В статье рассмотрен измерительный прибор как средство измерений, предназначенное для выработки сигнала измерительной информации в форме, удобной для непосредственного восприятия наблюдателем, а также непосредственное сравнение измеряемой величины с величиной, значение которой известно по параметрам прибора сравнения и определение общей погрешности и погрешностью цепи обратного преобразования.

Ключевые слова: измерение, процесс, элемент, оператор, сигнал, пружина, весы, электромеханический вольтметр, манометр, ртутный термометр, автоматически, преобразования.

Shertailakov G.M.
associate professor
JPI RUz
Jurabekov Zh.Y.
2nd year student
JPI RUz

BLOCK DIAGRAM OF A MEASURING DEVICE

Annotation. The article considers a measuring device as a measuring instrument designed to generate a signal of measuring information in a form convenient for direct perception by an observer, as well as a direct comparison of the measured value with the value whose value is known by the parameters of the comparison device and the determination of the total error and the error of the reverse conversion circuit.

Key words: measurement, process, element, operator, signal, spring, scales, electromechanical voltmeter, pressure gauge, mercury thermometer, automatically, transformation.

В любом измерительном процессе одним из основных элементов является оператор - наблюдатель. Поскольку сигнал измерительной информации на выходе измерительного преобразователя недоступен для непосредственного восприятия наблюдателем, этот вид средств измерений

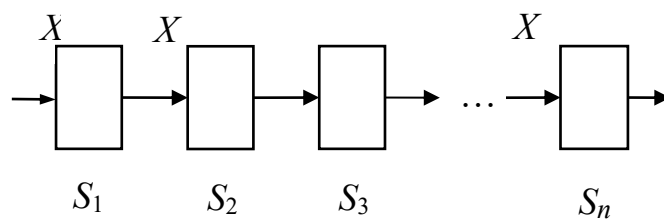
не имеет самостоятельного применения. Измерительные преобразователи используются только совместно с измерительными приборами или в составе измерительных установок или систем.

Измерительный прибор - средство измерений, предназначенное для выработки сигнала измерительной информации в форме, удобной для непосредственного восприятия наблюдателем.

По виду структурной схемы (схемы, описывающей последовательность преобразования сигнала измерительной информации в средстве измерений) измерительные приборы делят на *приборы прямого действия* и *приборы сравнения*.

Прибор прямого действия - измерительный прибор, в котором сигнал измерительной информации проходит ряд последовательных преобразований в одном направлении. Структурная схема такого прибора *разомкнутая* (рисунок 1).

Пример - Пружинные весы, электромеханический вольтметр, пружинный манометр, стеклянный ртутный термометр.



X и Y - входная и выходная величины измерительного прибора соответственно; P_1, P_2, \dots, P_n - отдельные преобразователи измерительной информации;

Рисунок 1. - Структурная схема измерительного прибора прямого действия

Для прибора по структурной схеме (рисунок 1) можно записать:

$$\delta_{\Sigma} = \delta_1 + \delta_2 + \dots + \delta_n,$$

$$S_{\Sigma} = S_1 S_2 \dots S_n,$$

где: $\delta_{\Sigma}, S_{\Sigma}$ - погрешность и чувствительность всего прибора;

$\delta_1, \delta_2, \dots, \delta_n$ - погрешности преобразователей P_1, P_2, \dots, P_n ;

S_1, S_2, \dots, S_n - чувствительности преобразователей P_1, P_2, \dots, P_n .

Приборы прямого действия характеризуются быстроедействием (например, электронный осциллограф), высокой чувствительностью, простотой использования, но имеют ограниченную точность.

Прибор сравнения - измерительный прибор, в котором производится (автоматически или с участием оператора) непосредственное сравнение измеряемой величины с величиной, значение которой известно. В таких приборах выходная величина Y с помощью специального преобразователя обратной связи ($P_{обр}$) преобразуется в величину X_k , однородную с входной величиной X , которая подается на вход прибора в противофазе с входной

величиной (величины X и X_k вычитаются на входе прибора). Структурная схема измерительных приборов сравнения *замкнутая* (рисунок 2).

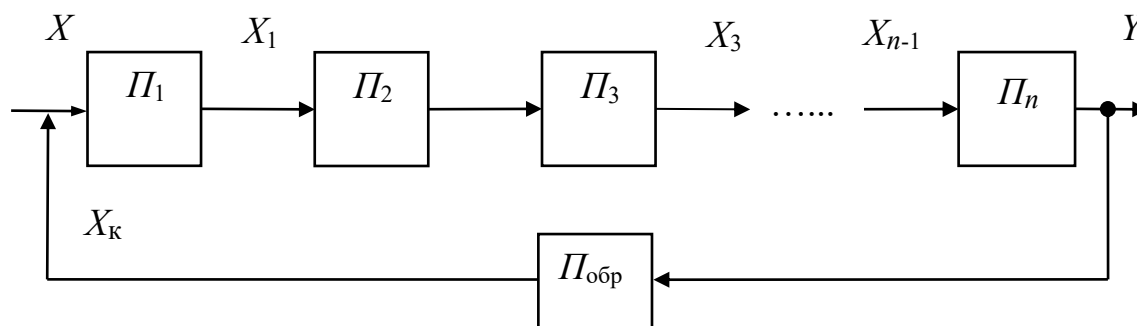


Рисунок 2. Структурная схема измерительного прибора сравнения.

Описанная обратная связь называется отрицательной и повышает стабильности характеристик прибора.

Для прибора по структурной схеме (рисунок 2) можно записать:

$$S_{\Sigma} = \frac{S_{np}}{1 + S_{np} \cdot S_{обр}} \quad \text{или} \quad S_{\Sigma} = \frac{1}{\frac{1}{S_{np}} + S_{обр}},$$

где: S_{np} и $S_{обр}$ - чувствительности (коэффициенты преобразования) цепей прямого и обратного преобразования соответственно.

При $S_{np} \gg 1$, можно считать, что $\frac{1}{S_{np}} \approx 0$. Тогда, $S_{\Sigma} \cong \frac{1}{S_{обр}}$.

Таким образом, параметры прибора сравнения и, соответственно, его общая погрешность определяется преимущественно параметрами и погрешностью цепи обратного преобразования.

Примерами приборов сравнения являются равноплечие весы, потенциометр постоянного тока, грузопоршневой манометр, мост постоянного тока, применяемый для измерения электрических сопротивлений.

По взаимосвязи между показаниями прибора (выходная величина) и измеряемой величиной измерительные приборы делят на *приборы аналоговые* и *приборы цифровые*.

Аналоговый прибор - измерительный прибор, показания которого являются *непрерывной функцией* измеряемой величины.

Цифровой прибор - измерительный прибор, автоматически вырабатывающий *дискретные* сигналы измерительной информации, показания которого представлены в цифровой форме.

По форме представления измерительной информации измерительные приборы делят на *показывающие* и *регистрирующие*.

Показывающий прибор - измерительный прибор, допускающий только отсчитывание показаний, в отличие от регистрирующего прибора, в котором предусмотрена и (или) регистрация показаний.

Регистрация показаний может выполняться как в аналоговой (например, на диаграммном диске), так и в цифровой форме (на бумажном или магнитном носителе).

Измерительные приборы можно разделить также на *приборы текущего значения* и *интегрирующие приборы*.

Показания прибора текущего значения отражают значение измеряемой величины на момент времени измерения (манометр, амперметр).

Интегрирующий прибор - измерительный прибор, в котором подводимая величина подвергается интегрированию по времени или по другой независимой переменной (счетчик электрической энергии, водосчетчик, планиметр).

По характеру установки на месте применения измерительные приборы разделяют на *стационарные*, предназначенные для жесткого крепления, и *переносные* - не предназначенные для жесткого крепления.

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Шертайлаков Г.М.
доцент
ДжПИ РУз
Муродов Д.Ш.
студент 1 курса
ДжПИ РУз

НЕКОТОРЫЕ ВИДЫ НЕОПРЕДЕЛЕННОСТИ ИЗМЕРЕНИЙ

Аннотация. По определению составлении списка источников неопределенности обычно удобно начать с основного выражения, используемого для вычисления результата из промежуточных величин, также с математической модели измерения. Все параметры в этом выражении могут иметь свои неопределенности, и уже поэтому они являются потенциальными источниками неопределенности. Кроме того, могут быть другие параметры, которые в явном виде не входят в выражение, используемое для нахождения значения измеряемой величины, но которые, тем не менее, влияют на результат эксперимента.

Ключевые слова: виды неопределенности измерений, с одним входом и одним выходом, статистические методы, среднее арифметическое, многократных измерениях, нормативных документов, сертификата, свидетельств.

Shertailakov G.M.
associate professor
JPI RUz
Murodov D.Sh.
1st year student
JPI RUz

SOME TYPES OF MEASUREMENT UNCERTAINTY

Annotation. By definition, when compiling a list of sources of uncertainty, it is usually convenient to start with the basic expression used to calculate the result from intermediate quantities, as well as with the mathematical model of the measurement. All parameters in this expression may have their own uncertainties, and for this reason they are potential sources of uncertainty. In addition, there may be other parameters that are not explicitly included in the expression used to find the value of the measured quantity, but which, nevertheless, affect the result of the experiment.

Key words: with one input and one output, statistical methods, arithmetic mean, multiple measurements, regulatory documents, certificates, certificates.

Оценкой x_i входной величины X_i могут быть показание измерительного прибора в случае однократного измерения, среднее арифметическое значение при многократных измерениях или заимствованные из нормативных документов, сертификата, свидетельств, справочника, этикеток производителя продукции и т.п.

До того, как приступить к оценке неопределенности измерений, прежде всего, следует составить список возможных источников неопределенности. На этом этапе нет необходимости учитывать количественные аспекты; целью является только обеспечение полной ясности в отношении того, что именно подлежит рассмотрению.

При составлении списка источников неопределенности обычно удобно начать с основного выражения, используемого для вычисления результата из промежуточных величин, также с математической модели измерения. Все параметры в этом выражении могут иметь свои неопределенности, и уже поэтому они являются потенциальными источниками неопределенности. Кроме того, могут быть другие параметры, которые в явном виде не входят в выражение, используемое для нахождения значения измеряемой величины, но которые, тем не менее, влияют на результат (например, время экстракции или температура). Могут быть также скрытые источники неопределенности. Все эти источники должны быть включены в список. Основными источниками неопределенности являются спецификация, моделирование, метод, средства измерения, окружающая среда, оператор и измеряемый объект.

Виды неопределенности измерений, виды составляющих неопределенности подразделяются по источникам их возникновения на неопределенности спецификации измеряемой величины, моделирования, метода, средств измерений (инструментальные), окружающей среды, оператора (личности) и измеряемого объекта.



Для количественного описания отдельных составляющих неопределенности какие-то из источников неопределенности, почти всегда приходится рассматривать по отдельности. В некоторых случаях это необходимо только для очень малого числа источников; в других, особенно когда имеется мало данных по эффективности метода или этих данных нет вовсе, каждый источник может потребовать отдельного изучения. Есть несколько общих приемов для установления индивидуальных составляющих неопределенности:

- экспериментальное варьирование входных переменных;
- использование сведений из технической документации, например, сертификатов измерений и калибровки;
- моделирование на основе теоретических принципов;
- использование суждений, основанных на предшествующем опыте или имитационном моделировании.

Далее рассмотрены отдельные составляющие неопределенности.

Неопределенность спецификации измеряемой величины. Размер измеряемой величины исходно зависит от параметров внешних влияний, воздействующих на объект измерения. Поэтому корректный подход к измерению требует полного предварительного описания (спецификации) измеряемой величины. Неполная спецификация измеряемой величины приводит к возникновению соответствующей неопределенности.

Известно, что целью измерения является определение (числового) значения измеряемой величины. Описание (спецификации) измеряемой величины включает в себя указания на время проведения измерений и условия их проведения. Условия проведения измерений указываются в виде совокупности влияющих величин, т.е. величин, которые не являются предметом измерений, но влияют на их результат, например, температура средств измерения.

Зависимость измеряемой физической величины y от параметров внешних влияний описывается посредством функции влияния. Функция влияния может быть определена экспериментально или существовать только как алгоритм, который должен быть реализован численно.

Неадекватное определение влияющих величин является причиной возникновения неопределенности спецификации и может привести к несоответствию между результатами измерений одной и той же величины, проводившихся в различных лабораториях.

Пример. Измеряемая величина — мощность P , рассеиваемая при температуре t на терморезисторе, имеющем значение R_0 при температуре t_0 и температурный коэффициент сопротивления α , и зависит от разности потенциалов V , подаваемых на клеммы терморезистора, как

$$P = f(V, R_0, \alpha, t) = \frac{V^2}{R_0 [1 + \alpha(t - t_0)]},$$

где V – входная величина;

t_0 , R_0 , α и t – влияющие величины.

Влияющие величины, от которых зависит измеряемая величина Y , сами могут зависеть от других величин, включая поправки и поправочные коэффициенты на систематические эффекты, что ведет к усложнению функциональной зависимости f , которая никогда не может быть записана точно. Поэтому, если функция влияния не моделирует функциональную зависимость до степени, определяемой требуемой точностью нахождения результата измерения, то для устранения этого в него должны быть включены дополнительные входные величины.

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Шильникова О.В.
ГБОУ школа №334
учитель начальных классов
Костенко А.А., к.псих.н.
доцент
кафедра психологии
ФГБОУ ВО «АГПУ»

АНАЛИЗ СОВРЕМЕННОГО УЧЕБНИКА НАЧАЛЬНОЙ ШКОЛЫ ПО РУССКОМУ ЯЗЫКУ

Аннотация. Изучение орфографии в начальной школе направлено на то, чтобы помочь детям осознать важность правильного языка не только в устной речи, но и на письме, показать, что необходимым компонентом письменной речи является орфографический навык.

Ключевые слова: вариативные учебно-методические комплексы, письменной связной речь, современный учебник, личность ученика, субъектный опыт жизни.

Shilnikova O.V.
primary school teacher
State budgetary educational institution school No. 334
Kostenko A.A., Ph.D. in Psychology
Associate Professor
Department of Psychology
FSBEI HE "ASPU"

ANALYSIS OF A MODERN PRIMARY SCHOOL TEXTBOOK IN THE RUSSIAN LANGUAGE

Abstract. The study of spelling in elementary school is aimed at helping children realize the importance of correct language not only in oral speech, but also in writing, to show that a necessary component of written speech is spelling skill.

Key words: variable educational and methodological complexes, written coherent speech, modern textbook, student's personality, subjective life experience.

Методическая работа по развитию речи реализуется посредством современных средств обучения, среди которых особое внимание принадлежит учебнику. Вариативные учебно-методические комплексы по русскому языку в своем составе содержат учебники и учебные пособия, методические рекомендации для учителя, контрольно-измерительные

материалы. Содержательная и целенаправленная работа учителя начальных классов по данным комплексам оказывает непосредственное влияние на развитие письменной связной речи обучающихся начальных классов.

Современный учебник как основа учебного процесса, представляет собой комплекс упражнений по грамматике, орфографии, орфоэпии, синтаксису, пунктуации и развитию речи. Он используется на всех этапах урока: при повторении, для справок по языковой теории, правописанию и развитию речи.

В процессе обучения современный учебник выполняет определенные функции:

- воспитательную (воспитание ума, формирование умений видеть явления языка в их взаимосвязях, прививание любви к родному языку, самовыражение самих учащихся в речи и т.п.);
- познавательную (передача определенного объема информации и знаний по предмету);
- развитие интеллекта (умственных способностей и речи).

Все эти три функции выступают как единое целое и носят определяющий характер по предмету. В связи с этим к учебнику предъявляется ряд требований: содержательные: он дает обучающимся языковой материал, адаптированный к детскому восприятию, в соответствии с программой и государственным стандартом; интегративные: учебник объединяет в систему различные области языка, в нем в единстве выступают и литературный текст, и материал грамматики, лексики, орфографии, графики и развития речи; методические: учебник организует познавательную деятельность обучающихся, предлагает методически подготовленный языковой материал различного назначения (упражнения, литературные образцы, отобранную лексику и др.).

Овладение огромного запаса не проходит неосознанно. из задач речи в начальной является словарной работы, основных ее направлений и их обоснование, процессами словаря школьников. В настоящее существует между словами и словами омонимами, т.к. не легко установить, ли два слова настолько, что их уже считать словами, т.е. омонимами, или эти значения еще что-то общее, и это полисемии.

Ставя грамматические задачи, учебник русского языка для начальных классов через конкретные приемы умственной деятельности в процессе последовательной, систематической работы со словом, предложением, текстом, через их разносторонний анализ способствует решению задачи развитию речи и мышления школьника, расширяет кругозор детей в области родного языка, создает языковую среду как условие формирования речевых умений. Учебный материал создает базу для развития связной речи: устные речевые упражнения, ознакомление с простейшими изобразительно-выразительными средствами языка (рассказывание, восстановление

деформированного предложения и небольшого текста, т. е. преобразующая речевая деятельность обучающихся).

Современное образование характеризуется вариативностью программ обучения, а, следовательно, и учебников по русскому языку. Из истории методики обучения русскому языку известно, что в XIX в. использовались учебники русского языка в вопросо-ответной форме – «Новая российская грамматика в вопросах и ответах» М. Меморского (1801г.), «Задачник письменных упражнений в родном языке» И.И. Паульсона (1875г.), «300 письменных работ. Задачи для самостоятельного упражнения в письме учеников всех трех отделений начальной школы» Н. А. Корфа (1882г.), «хрестоматия для изучения образцов русской словесности» Н.Ф. Бунакова (1877г.) и др.

Учебники прошлого можно классифицировать по следующим типам:

- вопросо-ответный учебник;
- учебник типа хрестоматии;
- «задачник» практического типа;
- учебник письменных упражнений.

В 20-е гг. XX в. появились учебники типа «рабочих книг» с практической направленностью для самостоятельной работы обучающихся. Особым основанием для типологии учебников являются научно-лингвистические концепции, лежащие в основе учебника. Современные учебники предусматривают структурное, семантическое, функциональное и коммуникативное направления. Все больше внимания при создании учебника уделяется теории речевой деятельности, появились отдельные пособия по риторике.

В современной методике различают следующие типы учебников по:

- принципу составления материала: концентрические, ступенчатые, линейные;
- методу, реализованному в учебнике
- статусу: (одобренные Министерством образования и науки РФ); пробные, экспериментальные.

Неоценимым достоинством учебников являются тексты, взятые из лучших произведений классической, художественной, научно-популярной литературы, произведения устного народного творчества, при этом следует отметить, что тексты не только доступны и близки жизненному опыту учащихся, но и оказывают определённое воздействие на эмоциональное состояние и субъективный опыт жизни. Это создаёт положительный эмоциональный настрой учащихся на уроке, приобщает к литературному языку, обогащает память языковыми и синтаксическими конструкциями образцовых текстов. Выполняя подобные упражнения, учащиеся соотносят предметы, изображённые на рисунке, с их названиями и делают вывод, что все предметы похожи по какому-то признаку и названы одинаково, хотя обозначают разные предметы. Также в 1-м классе дети знакомятся с

синонимами и антонимами. Во 2-м – 4-м классах в процессе выполнения практических заданий уточняется и углубляется представление учащихся о лексическом значении слов, об однозначных и многозначных словах, о прямом и переносном значении слов, синонимах и антонимах. Так дети в стихотворных упражнениях-текстах находят синонимы, наблюдают, одинаково или по-разному они произносятся и пишутся. Выполняя упражнения, учащиеся подбирают самостоятельно к словам синонимы или пользуются словарём синонимов, составляют предложения с любой парой синонимов

Аналогичная работа проводится и с антонимами. По наблюдениям, дети находят такие упражнения интересными, их занимает и радует процесс подбора точного и выразительного слова, и одновременно они учатся умелому использованию в речи этих слов. Большое значение автор учебников уделяет правильности речи младших школьников. Через тексты учащиеся знакомятся с правильным произношением слов («что», «скучно»), с нормами ударения в словах и формах слов, наиболее употребительных в речи («магазин», «свёкла», «шофёр», «поняла»), учатся правильному употреблению в речи слов «одел», «надел», «оделся» и других.

Формирование речевых умений происходит и в процессе обучения младших школьников написанию изложений. Работа с текстом-образцом помогает учащимся осознавать особенности построения текста и способствует развитию умения строить связные тексты. Положительным является то, что в учебнике представлено большое количество предметных и сюжетных рисунков, схем, которые с одной стороны, помогают ученику усвоить изучаемый материал, а с другой – используются для обогащения словарного запаса учащегося, развития связной речи. Помощь в работе учителю оказывают помещённые в конце учебника словари. При изучении любой темы внимание учащихся может быть привлечено к работе со словарём. Таким образом, учебный комплект по русскому языку (автор Т.Г. Рамзаева) способствует и повышению языкового образования, и развитию речевой деятельности младших школьников.

Учебник из серии «Свободный ум» – составная часть комплекта учебников и предметных программ непрерывных курсов, реализующих образовательную программу «Школа 2100». Органичное сочетание принципов научности, систематичности, перспективности, а вместе с тем доступности и увлекательности, которые заложены в учебных пособиях авторской серии, формирует у ребенка особый стиль учебной деятельности: Побуждает его задавать вопросы, размышлять, вызывать потребность учиться.

Одна из особенностей новых учебников по русскому языку для начальной школы состоит в том, что ведущим направлением учебной деятельности является овладение не просто письменной речью, а культурой письменного общения. Поэтому в ряд основных разделов, изучаемых в

каждом классе, выделяются разделы «Предложение», «Текст» и «Слово». Помимо названных разделов, в учебниках присутствует «Развитие речи», необозначенный как специальный раздел, но, безусловно, являющийся сквозной линией всего русского языка.

Пособие «Русский язык» предназначено для обучающихся (1-4). Цели этих уроков авторы определили таким образом:

- 1) формировать элементарные лингвистические умения;
- 2) овладеть письменной речью, культурой письменного общения (естественно наряду с развитием умений чтения, говорения и слушания);
- 3) закрепить признаки предложения, текста; уметь правильно орфографически и пунктуационно оформлять предложение на текст; на письме; читать, конструировать предложение из слов, а текст из грамотно построенных предложений;
- 4) заложить основу формирования функционально грамотной личности, обеспечить языковое и речевое развитие ребенка.

Таким образом, изучение орфографии в начальной школе направлено на то, чтобы помочь детям осознать важность правильного языка не только в устной речи, но и на письме, показать, что необходимым компонентом письменной речи является орфографический навык. Орфографически правильная письменная речь – залог успешного общения в письменной форме.

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*Эгамбердиева У.Т.
Ўзбекистон миллий университети
“Иқтисодий ва ижтимоий география”
кафедрасининг доценти
Аблямитов Ш.Қ.
Ориентал Университети “Тарих” кафедраси
стажёр ўқитувчиси*

ЎЗБЕКИСТОН – ҚОЗОҒИСТОН ЧЕГАРА ЗОНАСИ ТРАНСЧЕГАРАВИЙ ТУРИЗМ САЛОҲИЯТИ

Аннотатсия. Мазкур мақолада Ўзбекистон ва Қозоғистон Республикаларининг чегараолди ҳудудларидаги туристик салоҳияти, мавжуд туристик объектлар ва улардан фойдаланиш, туристик зоналарнинг инфратузилмаси каби масалаларга эътибор қаратилган. Мавжуд туристик объектлардан самарали фойдаланиш, янги туристик маршрутлар ишлаб чиқиш, ушбу ҳудудларда туристик оқимни ошириш ҳақида фикр-мулоҳазалар келтирилган.

Калит сўзлар: туризм, туристик объект, трансчегаравий туризм, туристик коридор, инфратузилма.

*Egamberdieva U.T.
associate professor
"Economic and social geography" department
National University of Uzbekistan
Ablyamitov Sh.Q.
trainee teacher
Department of "History"
Oriental University*

CROSS-BORDER TOURISM POTENTIAL OF THE UZBEKISTAN- KAZAKHSTAN BORDER ZONE

Annotation. This article focuses on such issues as the tourist potential of the border areas of the Republics of Uzbekistan and Kazakhstan, existing tourist facilities and their use, infrastructure of tourist zones. Opinions on effective use of existing tourist facilities, development of new tourist routes, increase of tourist flow in these areas are presented.

Keywords: tourism, tourist sites, cross-border tourism, tourist corridor, infrastructure.

КИРИШ

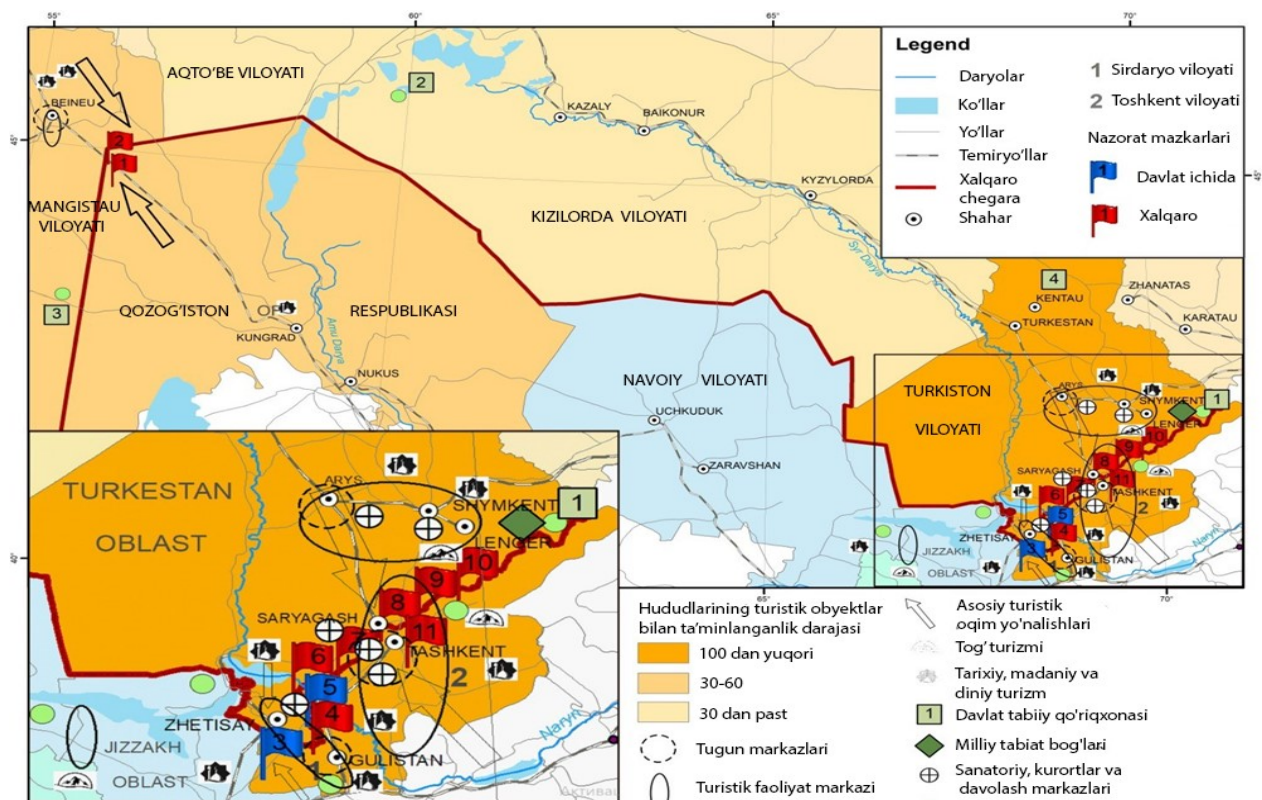
Ўзбекистон туризм соҳасида жуда ҳам улкан салоҳиятга эга бўлишига қарамасдан, узок йиллар давомида мавжуд имкониятлардан тўлиқ ва самарали фойдаланилмади. Туризм ривожини учун қулай иқтисодий ва ташкилий-ҳуқуқий шарт-шароитлар яратилмади, ҳамма ўз билганича фаолият юритиб келди. Натижада туризм соҳасида кутилганидан улкан ютиқларга эришилмади, мавжуд туристик имкониятлардан кенг ва максимал даражада фойдаланилмади.

Қўшни бўлган Ўзбекистон ва Қозоғистон Республикаларининг ўта бой тарихга эга эканлиги, кўплаб табиий, тарихий ва маданий туристик объектларга эга эканлиги, туристик салоҳиятининг юқори эканлиги ҳар иккала мамлакат туризмни ривожлантириш учун қулай имкониятлар яратади.

АСОСИЙ ҚИСМ

Биламизки, Ўзбекистон Республикасининг қўшни давлатлар билан энг узун чегараси айнан Қозоғистон Республикасига тўғри келади (2 203 км). Мана шундай улкан чегара олди ҳудудларида туризмни ривожлантириш орқали ҳар иккала мамлакатнинг туризмни ривожлантириш, янги туристик коридорларни яратиш, чегара олди ҳудудларида инфратузилмани яхшилаш, янги иш ўринларини яратиш, аҳоли бандлигини ошириш, аҳолини турмуш даражасини янада яхшилаш, икки мамлакат ўртасидаги ҳамкорликни янада ривожлантириш, юқори иқтисодий самарадорликларга эришиш каби натижаларга эришиш мумкин. Натижада ҳар иккала мамлакат иқтисодиётида туризм соҳасининг аҳамияти ортиб боради.

Ўзбекистонда 7000 дан ортиқ маданий ва тарихий обидалар мавжуд бўлиб, уларнинг 200 га яқини ЮНЕСКОнинг Жаҳон мероси рўйхатида киритилган. Ушбу ёдгорликлар асосан тўртта қадимий шаҳарларда жойлашган. Қозоғистоннинг ҳам рўйхатда 5 та объекти бор. Улардан учтаси маданий аҳамиятга эга ва яна иккитаси табиий аҳамиятга эга бўлган туристик объектлар ҳисобланади. Булар Хожа Аҳмад Яссавий мақбараси, Тамғалининг археологик ёдгорлиги, Чанян – Тянь-Шан коридоридаги Буюк Ипак йўли объектлари ҳамда Шимолий Қозоғистоннинг Сариярқо – даштлари ва кўлларида. Яна 13 та объект рўйхатга киритиш учун номзод сифатида эътироф этилган.



1-расм. “Қозоғистон - Ўзбекистон чегарадош ҳудудларидаги туристик фаолият марказлари ва инфратузилмалар”²⁵⁸

Қуйидаги харитада Қозўғистон ва Ўзбекистон чегарадош ҳудудларидаги туристик фаолият марказлари ва инфратузилмалар, ҳудудларнинг туристик объектлар билан таъминланганлик даражаси, асосий туристик оқим йўналишлари, туристик фаолият марказлари, тугун марказлари, туризм тармоқлари каби бир қанча маълумотлар келтириб ўтилган.

Ушбу харитада чегараолди вилоятлари туристик объектлар билан таъминланганлик даражаси кўра вилоятлар 3 та гуруҳга ажратилган. Бунда:

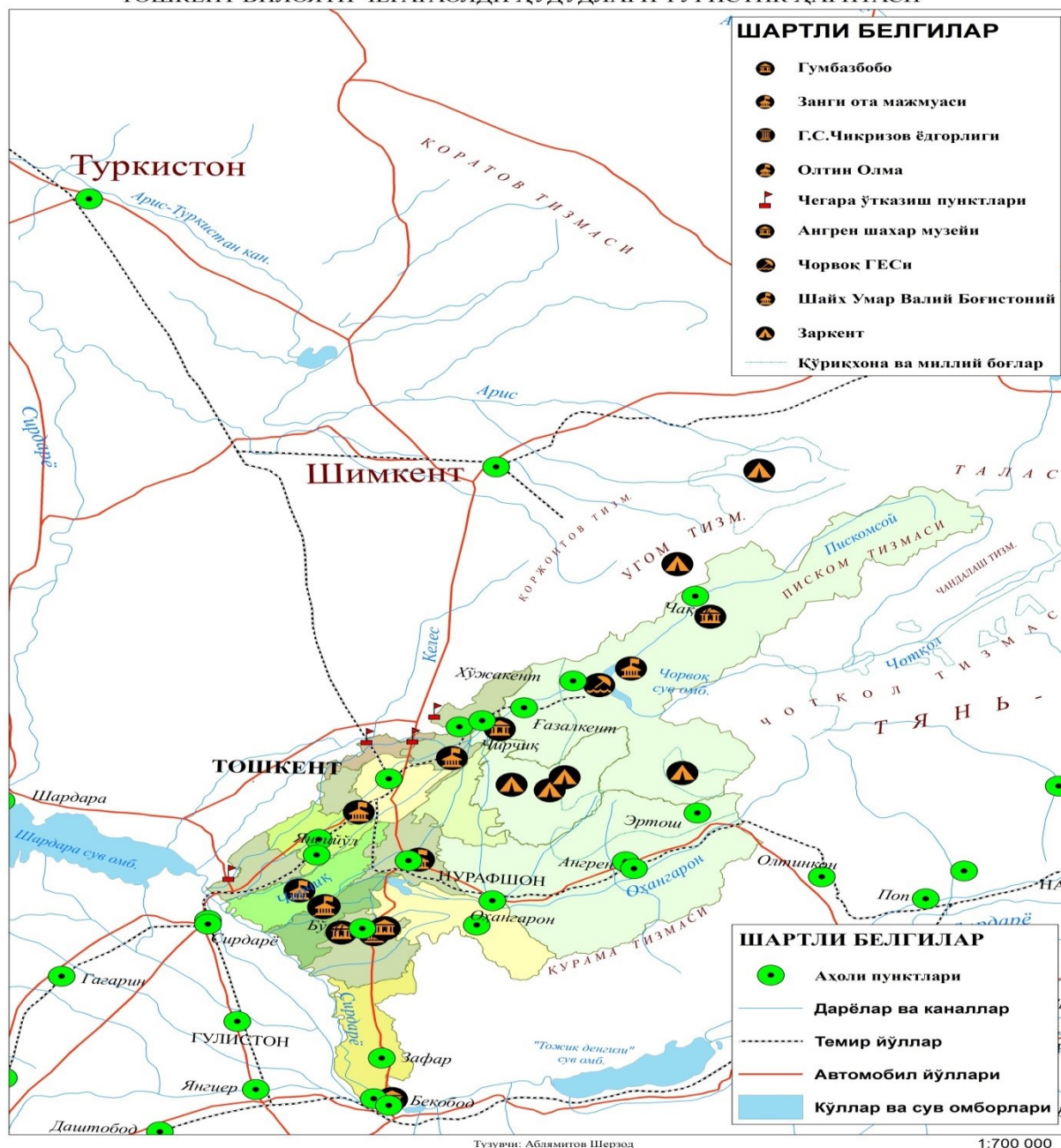
1. Туристтик объектлар билан таъминланганлик даражаси 100 дан юқори бўлган вилоятлар
2. Туристтик объектлар билан таъминланганлик даражаси 30 – 60 оралиғидаги вилоятлар
3. Туристтик объектлар билан таъминланганлик даражаси 30 дан паст бўлган вилоятлар

Вилоятлар орасида энг юқори кўрсаткич Қозоғистон Республикасининг Туркистон вилояти ҳамда Ўзбекистон Республикасининг Тошкент вилоятларига тегишли. Ушбу вилоятлар тарихий, маданий ва диний туристик объектлар билан яхши таъминланганлиги, тоғ туризмнинг мавжудлиги, экотуризм билан яхши таъминланганлиги, санатория,

²⁵⁸ Aigul Sergeyeva va boshqalar: “Development of Cross-Border Tourism in Accordance with the Principles of Sustainable Development on the Kazakhstan-Uzbekistan Border”

курортлар ва даволаш марказларининг кўп эканлиги, йирик туристик фаолият марказларининг мавжудлиги, аҳоли ўтказиш пунктларининг кўп эканлиги билан бошқа вилоятлардан фарқ қилади. Бундан ташқари Тошкент ва Туркистон вилоятларида аҳоли сонининг кўплиги, инфратузилмаларнинг яхши эканлиги ҳам муҳим аҳамият касб этади.

ТОШКЕНТ ВИЛОЯТИ ЧЕГАРАОЛДИ ХУДУДЛАРИ ТУРИСТИК ҲАРИТАСИ



2-расм. Тошкент вилояти чегараолди ҳудудлари туристик харитаси.

Ушбу харитада Тошкент вилоятининг Қозоғистон Республикаси билан чегараолди ҳудудларидаги мавжуд асосий туристик объектлар тасвирланган. Харитада бир қанча тарихий ва диний ёдгорликлар, дам олиш ҳудудлари, йирик аҳоли пунктлари, чегарадаги аҳоли ўтказиш пунктлари, халқаро ҳамда ички автомобил ва темирйўллар ва асосий гидрографик

объектлар тасвирланган. Ушбу харитадан ҳам кўришимиз мумкинки вилоятнинг Қозоғистон билан чегараолди ҳудудлари туристик объектлар билан яхши таъминланган. Бунда экотуризм ҳамда диний туризм алоҳида аҳамият касб этади. Вилоятнинг тоғли ҳудудлари алоҳида эътиборга лойиқ. Ушбу ҳудудлар ўзига хос, гўзал ва бетакрор табиий жозибадорлиги билан кўплаб туристлар эътиборини жалб қилмоқда. Айниқса, ёз мавсумида ушбу тоғ ва тоғолди ҳудудларига жуда катта ҳажмда Қозоғистон Республикасидан сайёҳлар ташриф буюради. Вилоятта 4 та аҳоли ўтказиш пунктлари мавжуд. Тошкент вилояти нафақат туристик марказлардан биридир, балки вилоят кўшни мамлакатдан ташриф буюрувчи туристларни бошқа вилоятлар билан боғлаш вазифасини ҳам бажармоқда. Тошкент вилоятида трансчегаравий туризмни янада ривожлантириш учун барча имкониятлар мавжуд. Шундай экан, мавжуд имкониятлардан самарали фойдаланган ҳолда соҳани юқори суръатлар билан ривожлантириш лозим.

Иккинчи гуруҳ вилоятларига эса Қорақалпоғистон Республикаси ва Қозоғистоннинг Мангистау вилоятлари киради. Бу вилоятларда кўпроқ тарихий, маданий ва диний туризм ҳамда экотуризм яхши ривожланган.

Табиий шароити, аҳолининг жойлашуви ва тарихий – маданий ривожланишига боғлиқ ҳолда энг паст кўрсаткичлар эса Кизилўрда ва Навоий вилоятларига тўғри келади. Бу икки вилоят туристик объектларнинг нисбатан кам эканлиги билан характерланади.

Хулоса қилиб айтадиган бўлсак, чегараолди ҳудудларида туризмнинг ривожланганлик даражаси бир қанча табиий, тарихий ва ижтимоий омилларга боғлиқ равишда ўзгариб боради.

Қозоғистон ва Ўзбекистоннинг чегарадош ҳамда чегараолди ҳудудларининг мана шундай улкан туристик салоҳиятга эга эканлиги ҳар иккала мамлакат аҳолисининг ҳам эътиборидан четда қолмайди. Мана шундай умумий тарихга эга эканлиги, табиий шароитнинг ўхшашлиги, аҳолининг этник келиб чиқишининг бирлиги омилларга боғлиқ равишда Қозоғистоннинг жанубий ва Ўзбекистоннинг шимолий чегара ҳудудларида трансчегаравий туризмни ривожлантириш учун барча имкониятлар мавжуд.

Бунинг учун албатта сайёҳлар учун барча зарурий шароитларни яратиш, инфратузилмани янада яхшилаш, чегараларда аҳоли ўтказиш пунктларидаги тизимларни соддалаштириш, янги туристик коридорларни ташкил этиш каби чора – тадбирларни амалга ошириш орқали эришиш мумкин.

Юқорида таъкидлаб ўтканимиздек Қозоғистон Республикасининг жанубий қисмлари ҳам бир қанча туристик объектларга эга ҳисобланади. Мамлакат жанубида Жетису (Етти дарё водийси) ўлкаси кўплаб сирларга тўла. Кўп асрлар давомида бу ҳудуд бир қанча қабилаларнинг йўллари кесишган жой бўлган. Натижада Буюк Ипак йўлининг катта қисми ана шу унумдор ерлардан ўтган.

Ҳозирда Жанубий Қозоғистон ҳудудларида сайёҳларга мўлжалланган қулай туристик маршрутларни, ноёб тарихий ва меъморий ёдгорлик мажмуаларини таклиф қилмоқда. Бундан ташқари бугунги кунда Жанубий Қозоғистоннинг маъмурий, маданий ва саноат маркази - Чимкент шаҳри Қозоғистоннинг учинчи йирик шаҳри ҳисобланади. Жанубий Қозоғистон вилояти ўзининг тарихий обидалари – мақбаралар, қадимий манзилгоҳлар ва қадимий шаҳарлар, қалъалари ва бир қанча табиий объектлари билан машҳурдир. Масалан, қадимий Туркистон шаҳри (қадимда Яси) ўтмишда Қозоқ хонлигининг сиёсий, савдо ва маданий маркази бўлган. Бу ерда Эзимхон, Хожа Аҳмад Яссавий (ХИВ аср) ва Султон Ондан мақбаралари ўзининг гўзаллиги ва нафислиги билан сайёҳлар эътиборини жалб қилмоқда. Жанубий Қозоғистон ҳудудларида Хожа Аҳмад Яссавий зиёратгоҳининг мавжудлиги бу минтақада диний туризмнинг ривожланишига асос бўлиб хизмат қилмоқда.

Чимкент шаҳрининг шарқида жойлашган қадимий Испиджоб шаҳри (ҳозирги номи Сайрам) Иброҳим ота (ХВИИ аср) ва Қорашаш ота (ХВИИ аср) мақбаралари билан машҳур. Ўтрор миллий археология музей - кўриқхонаси ҳам шу ерда жойлашган. У қадимий 12 та ўрта асрларга тегишли бўлган биноларни ўз ичига олади.

Қадимги Сигноқ, Ўтрор шаҳарлари ва қўшни ёдгорликларда олиб борилган археологик изланишлар натижасида кўплаб қимматли ёдгорликлар аниқланган. Булар: Қуйрук тепа, Кўк Мардон, Бобо ота масжиди мақбараси, Бобо Тўқта Шашати Азиз мақбараси (ХИХ-XX асрлар), Қорабур мақбараси (ХВИИИ - ХИХ асрлар), Бадибек ота ва Домалак она мақбаралари. Ордабаси тарихий-маданий кўриқхона зонасида Жанубий Қозоғистоннинг ноёб тарихий ва археологик ёдгорликлари ҳам мавжуд. Булар эса тарихий туризмнинг ривожланишига бевосита хисса қўшмоқда. Шунга ўхшаш тарихий ёдгорликларни кўриш учун ҳар йили минглаб маҳаллий ва хорижий туристлар ташриф буюрмоқда.

Бундан ташқари Орол кўлининг Қозоғистондаги сақланиб қолган қисмига ҳам йилдан – йилга туристик оқим ортиб бормоқда. Кўлнинг Ўзбекистондаги қисмининг қуриб қолганлиги, Қозоғистонда эса мавжуд эканлиги ҳар қандай сайёҳнинг қизиқишига сабаб бўлади. Ҳар иккала мамлакатда ҳам Оролбўйи регионида туризмни ривожлантиришга алоҳида эътибор қаратилаётганлиги ҳеч кимга сир эмас.

Қозоғистон Республикаси билан чегарадош бўлган Навоий вилояти ҳам бир қанча туристик объектларга эга ҳисобланади. Вилоят қадимий тарихга эга. Сармишсой дарасидан қимматли археологик топилмалар, Нурота тизмасининг ён бағирида қадимий қоятош расмлари топилган. Вилоятнинг энг гўзал масканларидан бири Айдаркўл гўзаллиги билан ажралиб туради. Бундан ташқари вилоятнинг Қизилқум чўлларида чўл туризмни ҳам ривожлантириш имконияти мавжуд. Шу каби табиий ва маданий туристик объектлар сайёҳлар эътиборидан четда қолмаяпти.

Қолаверса, ушбу ҳудудда туризмнинг бугунги кунда янги ривожланиб келаётган тармоқларидан бири бўлган – чўл туризмни ҳам ривожлантириш мумкин. Лекин ушбу вилоятдаги инфратузилманинг талаб даражасида эмаслиги ҳамда вилоятда аҳоли ўтказиш пунктларининг йўқ эканлиги, ушбу ҳудудларда туризм соҳасини ривожлантиришга улкан тўсиқ бўлмоқда. Навоий вилоятида ушбу масалаларга алоҳида эътибор қаратиш лозимдир.

Қорақалпоғистон Республикасида ҳам трансчегаравий туризмни ривожлантириш имконияти мавжуд бўлиб, бунда асосан Оролбўйи регионида ривожлантириш имкониятлари юқори. Бу ерларда инфратузилмани яхшилаш, янги, замонавий меҳмонхона ва шунга ўхшаш жойлаштириш воситаларини барпо этиш, йўл инфратузилмаларини сифатини ошириш орқали сайёҳлар оқимини ошириш мумкин. Қолаверса бу орқали ўта оғир экологик ҳолатда яшовчи Оролбўйи аҳолисининг ҳам иқтисодий ва ижтимоий ҳолат анча яхшиланиши мумкин. Мана шундай улкан салоҳиятга эга бўлган трансчегаравий ҳудудларда туризмни ривожлантириш бугунги куннинг долзарб масалаларидан бири десак янглишмаган бўламиз.

Бу икки мамлакатнинг мана шундай улкан туристик салоҳияти мамлакатлар хўжалигининг ажралмас қисми ҳисобланади.

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*Элмуратов Э.Б.
Иркутский национальный
исследовательский технический университет
Россия г.Иркутск
Пушмин П.С.
Иркутский национальный
исследовательский технический университет
Россия г.Иркутск
научный руководитель по направлениям аспирантуры
кафедра нефтегазового дела
Иркутский национальный
исследовательский технический университет
Россия, г.Иркутск
Хушвактов Ш.Ш.
Иркутский национальный
исследовательский технический университет
Россия, г.Иркутск*

**МЕТОДИЧЕСКОЕ ИССЛЕДОВАНИЕ К ВЫБОРУ
КОМПОНЕНТНОГО СОСТАВА И ПОКАЗАТЕЛЕЙ СВОЙСТВ
БУРОВОГО РАСТВОРА, ДЛЯ ОТБОРА КЕРНА В СЛОЖНО ГОРНО-
ГЕОЛОГИЧЕСКИХ УСЛОВИЯХ – АВПД ЮЖНОГО
УЗБЕКИСТАНА ГЛУБОКИМИ ЗАЛЕЖАМИ (ВЫБОР
ОПТИМАЛЬНОГО ТИПА БУРОВОГО РАСТВОРА ПРИ ОТБОРЕ
КЕРН)**

Аннотация. Основные изменения геохимических характеристик образцов породы на стадии отбора керна связаны с необоснованным выбором типа и показателей свойств промывочной жидкости. С целью получения представительного керна требуемого качества, обладающего необходимой геологической информативностью, актуально обоснование состава и показателей свойств промывочных, а также других параметров технологического процесса бурения.

Ключевые слова: отбор керна, буровой раствор, утяжеленный буровой раствор на водной основе.

*Elmuratov E.B.
Irkutsk National Research Technical University
Russia Irkutsk
Pushmin P.S.
Irkutsk National Research Technical University
Russia Irkutsk*

*scientific supervisor for postgraduate areas
Department of Oil and Gas Business
Irkutsk National Research Technical University
Russia, Irkutsk
Khushvaktov Sh.Sh.
Irkutsk National Research Technical University
Russia, Irkutsk*

METHODOLOGICAL STUDY ON SELECTION OF COMPONENT COMPOSITION AND DRILLING MUD PROPERTIES FOR CORING IN DIFFICULT MINING AND GEOLOGICAL CONDITIONS - AVPD OF SOUTHERN UZBEKISTAN WITH DEEP DEPOSITS (SELECTION OF OPTIMAL TYPE OF DRILLING MUD FOR CORING)

Abstract. The main changes in geochemical characteristics of rock samples at the stage of coring are associated with unreasonable choice of type and property indicators of flushing fluid. In order to obtain a representative core of the required quality, having the necessary geological informativeness, it is relevant to substantiate the composition and property indicators of flushing fluids, as well as other parameters of the technological drilling process.

Key words: Core sampling, drilling mud, water-based weighted mud.

ВВЕДЕНИЕ: керн является наиболее достоверным инструментом для изучения и подтверждения геологического строения нефтяных и газовых месторождений, уточнения результатов геологоразведочных работ. На основании данных по пористости, проницаемости, гранулометрическому составу, удельной поверхности, карбонатности, сжимаемости, насыщенности керна нефтью, газом и водой получают информацию о структуре, физико-механических и физико-химических свойствах продуктивных пластов. Отбор керна является сложной технологической операцией, требующей значительных финансовых и временных затрат, именно поэтому очень важно сохранить нативные свойства геологического материала.



Основные изменения геохимических характеристик образцов породы на стадии отбора керна связаны с необоснованным выбором типа и показателей свойств промывочной жидкости. С целью получения представительного керна требуемого качества, обладающего необходимой геологической информативностью, актуально обоснование состава и показателей свойств промывочных, а также других параметров технологического процесса бурения.

Методы: теоретических и практических исследований в области отбора керн, фильтрационные, реологические и другие методы исследования, определить и предложить критерии выбора состава и показателей свойств буровых растворов, используемых для отбора керн, в сложно горно-геологических условиях. Данная технология с участием научных авторов статьи по факту применено на скважинах месторождения Мустакиллик 25-йиллиги, Сурхандарьинской области Республики Узбекистан.

Цель бурения: подтверждение промышленных скоплений углеводородов, оценка фильтрационных емкостных и добычных характеристик продуктивных горизонтов XV, XVa и XVI (рис-1). На основании экспериментально-исследовательских работ для скважин Кустовой площадки месторождения Мустакилликнинг 25-йиллиги далее «М-25» (г.Бойсун, Сурхандарьинская область, Республика Узбекистан) по стратиграфическому разрезу расположенных пластов скважины проведен выбор оптимального рецептур бурового раствора с целью качественного отбора керн.

Данная месторождения по стратиграфию сложно-построенная залежь приуроченный к юрским подсолевым карбонатным отложениям, то есть газовой коллектор XV и XVa карбонатных горизонтов Юры ожидаемый продукт – высокосернистый газ, основная часть- метан (80-82%), присутствие сероводорода в большом количестве (H_2S - 8% и более) и углекислого газа (CO_2 -12,7%), высокими пластовыми давлениями до 65 мРа-АВПД и пластовая температура: $T=125-133^{\circ}C$. Залегание пластов находится под углом до 450, пласты на одном месторождении могут иметь разность залегания глубин до 500 м.

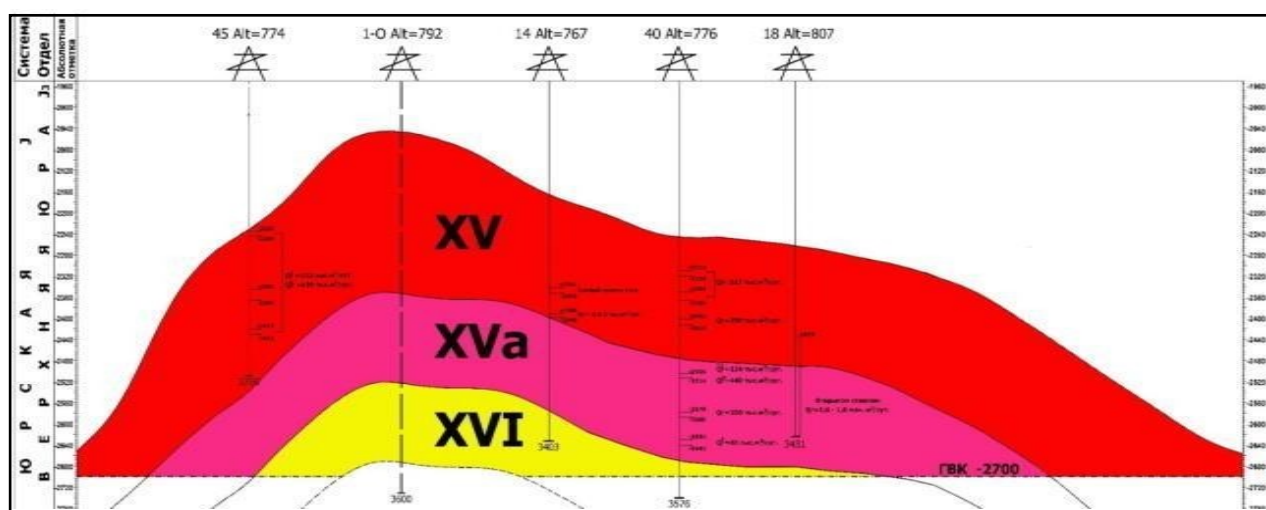


Рис-1. Продуктивные горизонты газового месторождения, схематичный геологический разрез.

Промышленная газоносность месторождения связана с юрскими карбонатными отложениями (общая мощность около 600-700м);

- XV горизонт представлен пересаживанием ангидритов и известняков;

- XVa горизонт представлен известняками, преимущественно мелководных лагунных фации;

- XVI горизонт сложен плотными, глинистыми известняками с прослоями мергели и известковистых глин.

Конструкция скважины Well №X (таблица-1)

Наименование колонны	Диаметр, мм		Глубина спуска колонны	Высота подъёма цемента -ВПС
	колонна	долота		
Направление	660,4	660,*84	0-40	0-40
Кондуктор	339,7	444,5	0-2800	0-2800
II промежуточная колонна	244,48	311,2	0-3250	0-3250
Эксплуатационная колонна	177,8	215,9	0-3776	0-3776

Стратиграфическое подразделение	Глубина залегания, по вертикали, м		Элемент залегания (падения) пластов по подобию		Коэффициент квертичности	Стандартное описание горной породы: полное название, характерные признаки (структура, текстура, минеральный состав и др.)
	от (срочно)	до (полюсные)	угол, градус	азимут, градус		
Четвертичные отложения	0	15	-	-	-	Лессы, суглинки, пески, галечники.
Неоген	15	420	8-10	210	1,2	Глины, алевролиты, песчаники, желто-серые и красно-бурые.
Палеоген	420	740	8-10	210	1,2	Глины, мягкие сыпучие с прослоями мергелей. Песчаники, крепкие, известковистые. Известняки
Мел:	740	2770				
Сенон	740	1270	8-10	210	1,2	Глины серые, темно-серые, слабо известковистые, сыпучие. Песчаники мелкозернистые, серые,
Турон	1270	1620	8-10	210	1,2	Глины зелено-серые, рыхлые, сыпучие, мергели серые, зеленовато-серые, крепкие. Известняки темно-серые, плотные, крепкие.
Сеноман	1620	1880	8-10	210	1,2	Песчаники, известковистые с прослоями известняков-ракушечников и гипсов. Глины с прослоями алевролитов и песчаников. Мергели серые, известковистые с прослоями алевролитов.
Альб	1880	2220	8-10	210	1,2	Глины серые и темно-серые, косослончатые с прослоями известняков-ракушечников и песчаников. Известняки-ракушечники серые, тонко слоистые Песчаники серые, среднезернистые.
Анг	2220	2280	8-10	210	1,2	Песчаники среднезернистые, зеленовато-серые, крепкие. Алевролиты серые с прослоями бурых глин (твердых, слоистых).
Баррем	2280	2380	8-10	210	1,15	Алевролиты с прослоями белых и розовых гипсов, реже песчаники и известняки-ракушечники. Глины, бурые, песчаные с включениями гипсов
Готерив	2380	2470	8-10	210	1,15	Песчаники красноцветные, среднезернистые, крепкие с прослоями алевролитов и гипсов. Глины красно-коричневые, плотные, песчаные.
Валанжин	2470	2770	8-10	210	1,15-1,22	Песчаники красноцветные, мелко среднезернистые с прослоями алевролитов. Глины красно-бурые с
Юра:	2770	3600				
Кимеридж-титон	2770	2820	15-20	210	1,1	Гипсы белые, розовые, набухающие при контакте с водой. Соль бесцветная, розовая с включениями гипса белого. Ангидрит серый и бесцветный с прослоями темно-серого известняка.
Кимеридж-титон (XV горизонт)	2820	3170	15-20	210	1,1	Известняки трещиноватые, серые, темно-серые, в нижней части глинистые. Ангидриты.
Келловей-оксфорд (XVa горизонт)	3170	3370	15-20	210	1,1	Известняки серые, темно-серые, доломитизированные, плотные, плитчатые с прослоями обломочных, водорослевых, биоморфных известняков.
Келловей-оксфорд (XVI горизонт)	3370	3570	15-20	210	1,1	Известняки темно-серые, плотные, афонитовые, глинистые, массивные.
Средняя юра (XVII горизонт)	3570	3600	15-20	210	-	Серые, темно-серые мелкокристаллические слоистые известняки и известняки-ракушечники с маломощными слоями песчано-глинистых сланцев и мергелей. Песчаники серые, мелкозернистые, известковистые, глинистые.

Литолого-стратиграфическая характеристика скважины (таблица-2)

давление и температура по разрезу

Стратиграфическое подразделение	Интервал, м		Градиенты давления				геотермический градиент градус/100м	Давления, МПа				Температура, градус, °С
	от (верх)	до (низ)	пластового давления	порового давления	гидро-разрыва пород	горного давления		пластовое	поровое	гидро-разрыва	горное	
1	2	3	4	5	6	7	8	9	10	11	12	13
Неоген + четвертичные	16	564	0,01	0,012	0,0175	0,019	0,0505	0.16	5.6	9.9	10.7	28.5
Палеоген (бухарские слои)	564	896	0,01	0,012	0,0175	0,019	0,0550	5.6	9.0	15.7	17.0	49.3
Сенон	896	1436	0,01	0,0135	0,0175	0,022	0,0403	9.0	14.4	25.1	31.6	57.9
Турон	1436	1828	0,01	0,0142	0,0175	0,022	0,0393	14.4	18.3	32.0	40.2	71.8
Сеноман	1828	2077	0,01	0,0142	0,0175	0,022	0,0375	18.3	20.8	36.3	45.7	77.9
Альб	2077	2435	0,01	0,0159	0,0187	0,022	0,0338	20.8	24.4	45.5	53.6	82.3
Апт	2435	2572	0,01	0,0159	0,0187	0,022	0,0333	24.4	25.7	48.1	56.6	85.6
Баррем	2572	2670	0,01	0,0159	0,020	0,022	0,0339	25.7	26.7	53.4	58.7	90.5
Готерив	2670	2779	0,01	0,0159	0,021	0,022	0,0360	26.7	27.8	58.4	61.1	100.0
Валанжин XIV горизонт	2779	2998	0,0152 - 0,0157	0,0157	0,0232	0,024	0,0375	42.2	45.6	69.6	72.0	112.4
Титон	2998	3249	-	-	-	0,024	0,0369	-	-	-	78.0	119.9
Кимеридж - верхний оксфорд XV горизонт	3249	3543	0,0187-0,0202	0,0202	0,0225	0,0245	0,0363	60.8	66.3	79.7	86.8	128.6
Верхний келловей-нижне-средний оксфорд XVa горизонт	3543	3776	0,0187-0,0202	0,0202	0,0225	0,0245	0,0363	66.3	70.6	85.0	92.5	137.1
Средний келловей XVI горизонт	3776	3966	0,0187-0,0202	0,0187-0,0202	0,0225	0,0245	0,0363	70.6	74.2	89.2	97.2	144.0
Лес-бат-нижний келловей (терр. юра)	3966	4700	0,0159-0,0168	0,0159-0,0168	0,0225	0,0245	0,0363	63.1	74.7	105.8	115.2	170.6

Примечание: Значения давлений приведены по кровле интервалов, а температуры - по подошве.

Программа отбора и исследования керна (таблица-3).

Стратиграфическое подразделение	Интервал, метр		Метраж отбора	Минимальный диаметр керна мм (in)	Максимальная проходка за долбление, м
	от (верх)	до (низ)			
Кимеридж – верхний оксфорд XV горизонт (J3km-tt)	2906	3162	256	101,6 (4")	до 54м*
Верхний келловей-нижнесредний оксфорд XVa горизонт (J3km-tt)	3162	3405	243	101,6 (4")	до 54м*
Средний келловей XVI горизонт (J2)	3405	3483	78	101,6 (4")	до 54м*

Всего			577		
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- Характер пород, слагающих продуктивный XV горизонт, основные коллекторские свойства – известняки порово – трещиновато – кавернозного типа с прослоями ангидритов. В основании и средней части разреза с маломощными прослоями темно-серых и серых пелитоморфных и глинистых известняков. Общее количество карбонатных прослоев увеличивается сверху-вниз по разрезу, в основании толщи оно становится максимальным.

- Продуктивный XVa горизонт сложен серыми и темно-серыми, органогенными, преимущественно плотными известняками. В отличие от нижележащих карбонатных пород и комковатых, вторично измененных, нередко кавернозных высокопористых известняков, составляющих основную часть объема гранулярного коллектора.

1. Выбор бурового раствора

- **Тип раствора** утяжеленный раствор плотностью $\gamma=2,16\text{гр}/\text{см}^3$ соответствует равновесию пластового давления при циркуляции. Плотность бурового раствора $\gamma=2,22\text{гр}/\text{см}^3$ соответствует коэффициенту запаса 1,03 над пластовым давлением.

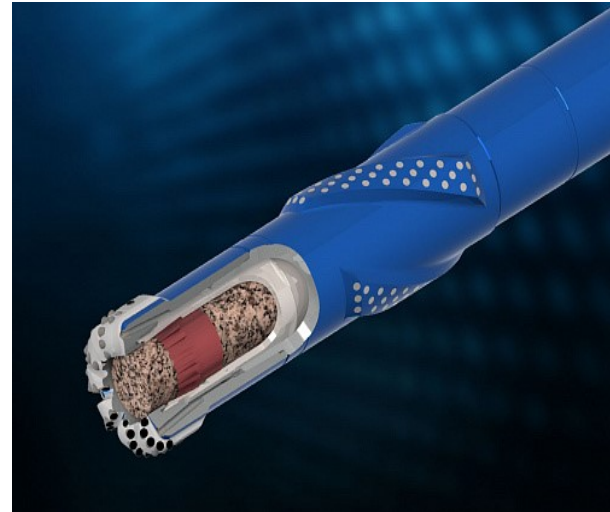
- **Ожидаемые осложнения:**

- поглощения бурового раствора ниже глубины 3162м;
- Газопроявление с глубины 2906м в процессе бурения, промывок, СПО и при несоблюдении плотности бурового раствора;
- Газопроявления с XVa горизонта вследствие поглощения бурового раствора;
- сужение стенок скважины против проницаемых пород в интервалах 2906-3405м;
- прилипание гладкой части труб против проницаемых интервалов из-за перепада давлений в системе скважина+пласт, при остановках движения бурильного инструмента.

1.1. Обзор опыта применения ингибированный минерализованный утяжеленных буровых растворов для отбора керна.

От компонентного состава и фильтрационных свойств промывочной жидкости, используемой на этапе отбора керн, во многом зависит изменение естественной флюидонасыщенности керна. Есть понятие, что буровые растворы на водной основе, состав фильтрата которых представлен водной фазой, приводят к увеличению значения водонасыщенности керна. Проникновение фильтрата бурового раствора во время отбора керна является одним из факторов, влияющих на его действие в месте насыщенности породы пласта.

Имеется ряд научных статей, что несмотря на широкую практику применения бурового раствора на водной основе для отбора керна, многие авторы высказывают опасение, что даже при условии достижения такими системами низких значений фильтрационных характеристик, контакт керна с буровых растворов неизбежно приводит к нарушению сохранности его свойств. Это происходит как при подъеме керна на дневную поверхность, так и при транспортировке к месту дальнейшего анализа.



Следует отметить, что применение традиционных буровых растворов для отбора керна на буровом растворе водной основе, может приводить к нарушению (изменению) его остаточной водонасыщенности, что, в свою очередь, затрудняет интерпретацию данных по нефтегазонасыщенности продуктивного пласта, получаемых в ходе исследования отобранного керна материала. Так, необходимо подчеркнуть, что системы буровых растворов с низким значением показателя фильтрации позволяют минимизировать проникновение раствора в керна, но смачиваемость породы и ее флюидонасыщенность могут изменяться при противоточном проникновении фильтрата бурового раствора или его диффузии до начала анализа керна.

Важную роль в обеспечении качества керна материала играет выбор не только типа бурового раствора, но также и показателей его технологических и специальных свойств. Особое внимание уделяют контролю плотности, фильтрационных и реологических свойств бурового раствора.

С целью предотвращения «загрязнения» порового пространства керна твердой фазой и фильтратом бурового раствора для отбора керна допускается применение исключительно буровых растворов с ограниченной фильтрацией.

При этом, необходимо отметить, что разработанный и примененный утяжеленный буровой раствор ингибирующего минерализованного на водной основе (обработанные химреагентами для предупреждения набухания разбуриваемых пород и чрезмерного обогащения раствора твердой фазой) могут последовательно минимизировать проникновение фильтрата и обеспечить отбор керна с непроницаемыми центрами.

Данная практика наиболее распространяется при бурении поисково-разведочных скважин месторождения Мустакилликнинг 25-йиллиги (далее М-25), и при использовании утяжеленного бурового раствора ингибирующего минерализованного на водной основе для отбора керна особое внимание уделяется контролю показателя фильтрации, в том числе

при высокой температуре и высоком давлении (НТНР – high temperature and high pressure) и толщине фильтрационной корки.

1.2. Методические подходы к выбору типа и показателей свойств буровых растворов для отбора керна.

В условиях многообразия существующих рецептур буровых растворов, перед специалистами проектных и геологических организаций встает проблема выбора компонентного состава и показателей свойств бурового раствора для отбора керна в конкретных геолого-технических условиях месторождения.

При обосновании выбора компонентного состава бурового раствора для отбора керна должны учитываться следующие критерии:

- цели отбора керна и конкретный перечень планируемых геохимических анализов керна;
- литологический состав пород в интервале отбора керна, в том числе классификация пород по категориям буримости;
- наличие/отсутствие и виды осложнений при строительстве предыдущих скважин на конкретном месторождении или в аналогичных геолого-технических условиях бурения.

Наибольшую трудность в сохранении керна и его максимального выноса вызывает отбор в рыхлых, набухающих, перемятых горных породах, растворяющихся в промывочной жидкости.

С целью обеспечения достоверной интерпретации геофизической информации в составе всех типов буровых растворов для отбора керна должны отсутствовать химические реагенты, отрицательно влияющие на работу телеметрического и каротажного оборудования (например, гематит, магнетит).

Предлагаемый алгоритм выбора и приготовление компонентного состава буровых растворов для отбора керна по скважинам месторождение Мустакилликнинг 25-йиллиги «г.Бойсун, Сурхандарьинской области. Республика Узбекистан» приведен в таб.4.

Таблица-4. Компоненты бурового раствора Ингибирующего минерализованного на водной основе

Наименование продукта	Диапазон концентрации	Описание и функции
CAUSTIC SODA / КАУСТИЧЕСКАЯ СОДА	1,5 - 4,0 кг/м ³	Регулятор pH
SODA ASH / КАЛЬЦИНИРОВАННАЯ СОДА	0,5 - 2,0 кг/м ³	Нейтрализатор жесткости
BENTONITE / БЕНТОНИТ	3,0 - 5,0 кг/м ³	Структурообразователь
MAGNESIUM OXIDE / ОКСИД МАГНИЯ	1,0 – 2,0 кг/м ³	Буфер pH
MIL-PAC LV / МИЛ-ПАК ЛВ	4 – 6 кг/м ³	Понизитель водоотдачи

MIL-PAC LV / МИЛ-ПАК Р	2 – 4 кг/м3	Модификатор реологических параметров, понизитель водоотдачи
SODIUM CHLORIDE / ХЛОРИСТЫЙ НАТРИЙ	320 кг/м3	Минерализатор
БИО-РАQ / БИО-ПАК	3,0 – 6,0 кг/м3	Термостойкий регулятор фильтрации
XAN-PLEX D / КСАНПЛЕКС	1,0 – 3,0 кг/м3	Структурообразователь
SULFATROL / СУЛЬФАТРОЛ	10,0 – 15,0 кг/м3	Микроколматант
CALCIUM CARBONATE F,M,C / КАРБОНАТ КАЛЬЦИЯ кр, ср, мелк	60 – 100 кг/м3	Кислоторастворимый кольматант
BARIT / БАРИТ	1000 – 1500 кг/м3	Утяжелитель
LD-9 / ЛД-9	0,3 – 0,5 л/м3	Пеногаситель
REMACIDVER / РЕМАЦИДВЕР	0,5-1,0 л/м3	Бактериад
HIMOLUBE / ХИМОЛУБ	10,0 – 20,0 л/м3	Смазочная добавка
LIME / ИЗВЕСТЬ	1,0 – 2,0 кг/м3	Нейтрализатор пластовых агрессий
DRILL-THIN / ДРИЛЛ-ТИН	2,0 – 4,0 кг/м3	Разжижитель
ALL-TEMP / ОЛЛ-ТЕМП	2,5 – 4,0 кг/м3	Высокотемпературный пластификатор
MIL-GARD / МИЛ-ГАРД	10,0 – 15,0 кг/м3	Нейтрализатор сероводорода

Таблица 5. Параметры бурового раствора

Параметры БР	Ед.изм	Значения
<i>Плотность</i>	<i>гр/см3</i>	<i>2,16 / MPD 2,24*</i>
<i>Условная вязкость</i>	<i>с</i>	<i>70 - 100</i>
<i>Пластическая вязкость</i>	<i>сПз</i>	<i>30 - 70</i>
<i>Динамическая напряжение сдвига - ДНС</i>	<i>фунт / 100 фут2</i>	<i>18 55</i>
<i>Статическая напряжение сдвига - СНС</i>	<i>фунт / 100 фут2</i>	<i>4 -20 / 6 -45</i>
<i>Водоотдача (фильтрат)</i>	<i>см3 / 30мин</i>	<i>≤ 4</i>
<i>Корка - К</i>	<i>мм</i>	<i>≤ 3</i>
<i>pH</i>		<i>10,0 – 11,0</i>
<i>Содержание смазки</i>	<i>%</i>	<i>1 – 2</i>
<i>Общая жесткость</i>	<i>мг/л</i>	<i>≤ 800</i>
<i>Содержание хлорид ионов Cl</i>	<i>мг/л</i>	<i>замер для выбора обработки раствора</i>
<i>МВТ</i>	<i>кг/м3</i>	<i>≤ 28</i>
<i>Содержание твердой фазы низкой плотности</i>	<i>%</i>	<i>≤ 8</i>
<i>Rf / Mf</i>		<i>замер для выбора обработки раствора</i>
<i>Содержание карбоната кальция</i>	<i>кг/ м3</i>	<i>≤ 65</i>

Дополнительные требования к компонентному составу бурового раствора для обеспечения репрезентативности керна в зависимости от целей работ по отбору керна и видов геохимических исследований. Буровые растворы при проникновении внутрь керна в процессе отбора оказывают влияние на естественное флюидонасыщение пород.



Буровой раствор в данном интервале до отбора керна должен быть заблаговременно обработан реагентом MIL-GARD поглотителем сероводорода и известью «устойчивость к CO_2 и H_2S », также необходимо доработан ALL-TEMP, VOI-PAQ, Хлоридом Натрия – NaCl и Баритом BaSO_4 . При приготовлении буровых растворов новых порции необходимо поддерживать концентрации всех реагентов согласно таблице № 4 и 5. Не допускать снижения pH ниже 10,5 для набухания ангидритов и

влияния сероводорода. Вынос керна при каждом рейсе составил – от 95% до 100% (до $\pm 18\text{м}$). КERN отобран в алюминиевую трубу, распилен на метровые отрезки, закрыто с торцов концевыми крышками и хомутами и уложен в специальный ящик.

Для предупреждения возникновения осложнений необходимо контролировать седиментационную устойчивость бурового раствора.

Произвести обработку раствора при последнем рейсе перед отбором керна и привести параметры раствора в соответствии Программой промывки при бурении скважины, в процессе отбора керна обработка раствора запрещается, за исключением случаев ликвидации НГВП или поглощений.

Реологические свойства бурового раствора (пластическая вязкость, динамическое напряжение сдвига, статическое напряжение сдвига) определяют качество очистки ствола скважины от выбуренной породы, значение эквивалентной циркуляционной плотности раствора, величину гидродинамических давлений, седиментационную (к оседанию утяжелителя) и агрегативную (к слипанию частиц дисперсной фазы) устойчивость раствора во времени.

Значения показателей реологических свойств бурового раствора, используемого, в том числе, для отбора керна, определяются по результатам

гидравлических расчетов промывки ствола скважины с учетом максимальной циркуляционной температуры бурового раствора.

При отборе керн в условиях повышенных пластовых температур буровой раствор должен также сохранять агрегативную и седиментационную устойчивость, стабильность реологических свойств при температуре, соответствующей максимальной пластовой.

Для буровых растворов на водной основе в случае необходимости определения физико-химических свойств пластовых флюидов, содержащихся в образцах керн, дополнительным требованием является контроль удельного электрического сопротивления бурового раствора.

Точное значение удельного электрического сопротивления используется для внесения соответствующих корректировок при интерпретации полученных геохимических данных при исследовании керн.

Вывод

Выбор технологических жидкостей для отбора керн должен определяться требованиями к сохранению исходных свойств отбираемого кернового материала, свойствами породы, свойствами технологической жидкости, а также конкретными условиями бурения с отбором керн. Учёт перечисленных факторов может позволить провести целенаправленный выбор технологических жидкостей, обеспечивающих сохранение необходимого комплекса нативных свойств породы при отборе керн. Определены наиболее перспективные типы буровых растворов для отбора керн с точки зрения сохранения исходных свойств отбираемой породы. Предложен алгоритм выбора типа и компонентного состава буровых растворов, используемых для отбора керн, в зависимости от целей работ, категории пород по трудности отбора керн и видов геохимических исследований.

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*Эргашев У.А.
преподаватель
кафедра общественных наук и спорта
Ферганский политехнический институт
Республика Узбекистан, г.Фергана*

ФИЛОСОФСКИЕ АСПЕКТЫ НРАВСТВЕННО-ЭКОЛОГИЧЕСКОЙ КУЛЬТУРЫ ЧЕЛОВЕКА

Аннотация. В данной статье научно анализированы нравственно-этические аспекты глобализации экологических отношений.

Ключевые слова: этические нормы, глобальная экологическая стабильность, национальные и универсальные нормы этики, ценность, экологическая культура, экологическое образование.

*Ergashev U.A.
lecturer
Department of "Social Sciences and Sports"
Fergana Polytechnic Institute
Republic of Uzbekistan, Fergana*

PHILOSOPHICAL ASPECTS OF HUMAN MORAL AND ECOLOGICAL CULTURE

Annotation. In this article contains a scientific analysis of the moral and ethical aspects of the globalization of environmental relations.

Key words: ethical norm /global environmental stability/ national and universal norm of ethics; value; ecological culture; ecological education.

Опыт исторического развития человечества показал, что при переходе от одного общественно-политического строя к другому возникают разрывы между традиционностью и преемственностью в отношениях «природа-общество-человек». В частности, дестабилизация экономической и политической жизни непосредственно наблюдается в экологических отношениях. Однако глобализация экологических отношений требует совершенствования управления этим процессом с духовно-нравственной точки зрения.

Понять роль экологической этики в рациональном управлении отношениями «природа-общество-человек». Уместно частично рассмотреть взаимосвязь с ценностями, которая является важным философско-этическим понятием. Ценности являются важными факторами, регулирующими культурное развитие общества и личности. Именно

поэтому этот вопрос тщательно изучается философами, социологами, антропологами и психологами.

Чувство любви к близким дано не каждому, воспитать такое чувство - очень трудная задача, так как воспитать любовь к природе означает отношение к себе, в этом суть экологической этики и культуры человека..

Экологическая морально-этическая ответственность человека сводится к вопросам того, насколько нравственно он действует в окружающей природной среде и на каких действиях основывается, осознает ли он, что природа является национальным общественным богатством, и может ли он распоряжаться ею, его отношение к природе основано на принципах гуманности.

Решение вышеперечисленных проблем является критерием формирования экологической и нравственной культуры у человека. Нравственное отношение человека к природе определяется в его повседневной деятельности. В настоящий момент нравственно-экологическая деятельность каждого человека определяется посредством целей и задач общества. Здесь возникает необходимость выработки научно-методического консенсуса норм экологической этики и использования его на практике. Поэтому нормы экологической этики должны основываться на конкретной научно-методической системе, которая служит формированию ценностного отношения к природе и установлению социально-этических норм. В классической литературе в этике имеются в виду модели поведения, возникающие в человеческих отношениях. Если присмотреться к этому сокращенному понятию, то можно увидеть, что отношение и поведение человека к природе напрямую связано с нравственностью и этической экологической культурой. Формирование человеческих качеств всегда должно учитываться при реализации этической экологической культуры. Человеку необходимо не прятать в своей оболочке свои человеческие качества, не отделяться от общества, наоборот, мобилизоваться на общественно-творческую, нравственно-экологическую деятельность, то есть воплощаться как социальная личность. Как уже говорилось выше, человек по своей природе социален. Поэтому понятие человека характеризуется социальными условиями, социальным содержанием, социальной активностью, оценивается его социальным положением и целевым назначением. Человеку всегда свойственен высокий уровень активности и творчества. Соответственно, сущность его человечности становится невидимой, раскрываются его способности.

Экологическая нравственная культура человека формируется в ходе его природоохранной деятельности, эта особенность возникает в обществе, социальной группе, семье, кругу друзей и формирует уникальную микросреду, в которой необходимо единство объективности и субъективности, существенного и несущественного а также и случайных факторов. Этическая культура способствует тому, что экологическая

культура становится все более совершенной. В этом смысле можно сказать, что мир человека – это мир окружающей его среды, поэтому отношение человека к природе должно иметь этическую окраску, а это означает, что экологическая этика и культура неразрывно связаны с духовной зрелостью человека.

Например, состояние общественного мнения граждан и общественности в Узбекистане и его изучение имеют важное значение в исследовании уровня экологической этики. В том смысле, который мы рассматриваем, он характеризуется большим акцентом на экологической этике и культуре, а также разоблачением ущерба природной среде средствами массовой информации. На этом этапе необходимо уделить особое внимание изучению и учету мнения общественности. Потому что, прежде всего, общественное мнение – это социальное явление, выражающее не только точку зрения отдельного человека, группы или определенных социальных слоев, но и волю, настроение, цели и стремления всего общества.

Общественное мнение у узбеков формируется в первую очередь на основе окружения. Махалля – уникальное и неповторимое социальное явление, свойственное преимущественно узбекскому народу и нации. Соседская жизнь – это существование. Его важная роль в том, что соседство с детства прививает человеку чувство заботы о природной среде. С этой точки зрения, «после обретения Узбекистаном подлинной независимости восстанавливаются исторические традиции узбекского народа, принимаются меры на всех уровнях по восстановлению демократического органа самоуправления, такого как махалля, которое сейчас приобрело новый смысл».

Таким образом, методологической основой этико-экологической культуры является целое философское учение. Вообще говоря, в основе этого философского учения лежит отношение человека к природе, деятельность высокого уровня, основанная на любви к окружающей среде. По своей сути это означает единство и гармонию отношений между природой и обществом, между человеком и природой. Об этом писали философы древнего мира (Эпикур и др.), основавшие теорию этики. В гармонии с природой человек совершенствуется физически, социально и духовно. Поэтому важно развивать экологическое нравственное сознание и культуру в связи с формами общественного сознания, которое проявляется как выражение социально-экологического поведения людей и принципов отношения к ценностям, представляет собой гармонию между «человеком-природой». -общество".

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Эргашев А.Р.

Ўзбекистон Республикаси Банк-молия академияси магистранти

БОЖХОНА ОРГАНЛАРИНИНГ БОШҚАРУВ ФАОЛИЯТИДА ЮЗАГА КЕЛАДИГАН СТРЕССЛАР ВА МУАММОЛИ ҲОЛАТЛАРНИ БОШҚАРИШ БЎЙИЧА ХОРИЖИЙ ТАЖРИБА

Аннотация. Мақолада илгор ривожланган давлатларнинг божхона органларида бошқарув фаолиятида юзага келаётган стресс ва муаммоли вазиятларни бошқаришда эришилган натижалар ва қўлланилаётган методикалар бўйича таҳлилий маълумотлар берилган бўлиб, миллий божхона тизимини такомиллаштириш юзасидан таклифлар берилган.

Калит сўзлар: божхона органлари, божхона менежменти, халқаро стандартлар, ягона божхона сиёсати, менежер, Face control, маркетинг.

Ergashev A.R.

graduate student

Academy of Banking and Finance

Republic of Uzbekistan

FOREIGN EXPERIENCE ON MANAGEMENT OF STRESS AND PROBLEM SITUATIONS IN THE ADMINISTRATIVE ACTIVITY OF CUSTOMS AUTHORITIES

Abstract. The article provides analytical information on the results and methods used in the management of stress and problem situations arising in the management activities of the customs bodies of advanced countries, and offers suggestions for improving the national customs system.

Key words: customs authorities, customs management, international standards, unified customs policy, manager, Face control, marketer.

КИРИШ

Замонавий божхона тизимини яратишда ривожланган давлатларнинг тажрибалари ва Жаҳон божхона ташкилоти томонидан жорий этилаётган халқаро стандартларга асосланган ҳолда миллий бошқарув ва ижро этиш принципларини ишлаб чиқилишига алоҳида аҳамият қаратиб келинмоқда.

Таъкидлаш жоизки, божхона органлари фаолиятини рақамли трансформацияси жараёнларида бошқарув фаолиятини тартибга солиш ҳам рақамлаштиришни талаб этмоқда. Табиийки, рақамли технологиялар билан ишлаш жараёнларида ҳам турли хил муаммоли ҳолатлар юзага келади. Натижада бошқарув фаолиятида стресс ва муаммоли вазиятлар юзага келиб, ходимлардан қарор қабул қилишда барча сабаб ва омилларни инобатга олинишини талаб этади.

Халқаро амалиётда узоқ йиллар давомида орттирилган малака ва тажрибаларга асосланган ҳолда ривожланган давлатлар ўзларининг бошқарув фаолиятида юзага келаётган стресс ва муаммоларни ҳал этиш усуллари амалиётга жорий этишган. Миллий божхона тизимини бошқариш жараёнларида ҳам юзага келаётган стресс ва муаммоли вазиятларда қарор қабул қилишни такомиллаштиришда ривожланган давлатларнинг илғор тажрибаларини чуқур ўрганган ҳолда тарғиб этиш мақсадга мувофиқ деб ҳисобланади.

ТАҲЛИЛ ВА НАТИЖАЛАР

Ўзбекистон билан энг катта савдо айланмасига эга бўлган Россия Федерациясининг Федерал божхона хизматида бошқарув фаолиятини тартибга солишда энг самарали восита кадрларни тайёрлаш тизими сифатида қаралади. Хусусан, Хизматга қарашли Федерал божхона академиясида курсантларга “Божхона менежменти” дарс соатлари қўйилган бўлиб, ушбу ўқув машғулотларида курсантлар бошқарув фаолиятини юритиш, бошқариш, стресс ва муаммоли вазиятларда қарор қабул қилиш, стратегик бошқарув, уни амалга оширишнинг принциплари бўйича ўқитилади. Шунингдек, хизматдаги ходимларни юқори лавозимларга тайинлашда ҳам бошқарув йўналишида қўшимча малака ошириш курслари жорий этилган.

Маълумки, Россия Федерацияси, Қозоғистон, Қирғизистон, Арманистон ва Беларус Республикалари Евросиё иқтисодий иттифоқи таркибида бўлганликлари ва улар учун ягона божхона макони амалда бўлганлиги сабабли уларни божхона қонунчилиги ягона божхона сиёсатида жамланган. Шу сабабли, божхона органларида бошқарув фаолияти бўйича Россия амалиётини пост совет маконидаги бошқа давлатлар жумладан, Беларус, Қирғизистон, Тожикистон ва Қозоғистон Республикаларида ҳам учратиш мумкин.

АҚШнинг Федерал божхона хизмати божхона менежменти бўйича алоҳида ва ўзига хос тажрибага эга тузилма ҳисобланади. Ушбу давлатда юқори замонавий технологиялардан фойдаланган ҳолда хизмат кўрсатиш тизимини яратиш мақсадида ACS ахборот тизими ишга туширилган. Шунингдек, ушбу давлат божхона хизматининг бир қатор муҳим жиҳатлари мавжуд:

- АҚШ божхона хизматлари тўлиқ рақамлаштирилганлиги сабабли унда жараёнларни ва ходимлар фаолиятини бошқаришда мобил тартибда фаолиятни тезкорлик билан замон талаблари ва юзага келган муаммоли вазиятларни таъсири орқали ўзгартира олиш қобилиятига эга;

- божхона қонунчилиги халқаро стандартлар асосида шаффоф тизимга айлантирилганлиги сабабли жараёнларни бошқаришда стресс ва муаммоли вазиятларни тезкор бартараф этиш имконияти мавжуд;

- ходимларни бошқариш лавозимида хизмат қилувчи ходимлар менежерлар ҳисобланади ва уларнинг барча стресс ва муаммоли

вазиятларда қарор қабул қила олиш қобилиятига эга бўлган, ўқув курсларидан ўтган ходимлардан қўйилади.

Япония божхона хизмати божхона маъмурчилиги бўйича ўзининг инновацион ёндашувлари билан жаҳондаги энг юқори даражада ривожланган божхона хизматларидан бири ҳисобланади. Япония божхонаси тарихи бир неча минг йилликларга бориб тақалади.

Кунчиқар мамлакатда товарлар импорти ва экспортида божхона тўловларини қўллаш амалиёти бундан 153 йил муқаддам – 1866 йилдан йўлга қўйилган. Ўша йили мамлакатда Хокодате, Нагасаки, Йокогама, Хьюого, Осака, Ниигата каби портлар халқаро савдо учун очилган.

Бугунги кунда, Япония божхона хизмати таркибида 9 та ҳудудий божхона бошқармалари, 189 та божхона идоралари, шу жумладан 120 та денгиз порти ва 30 та аэропортни қамраб олади. Япония божхона органларида ҳозирда 9 минг нафардан ортиқ божхона ходимлари хизмат олиб боради.

Божхонага доир муносабатлар “Божхона тўғрисида”ги, “Божхона тарифлари тўғрисида”ги, “Вақтинчалик божхона тарифлари тўғрисида”ги қонунлар ва бошқа норматив ҳуқуқий ҳужжатлар билан тартибга солинган. Япония божхона органлари фаолиятига NACCS электрон ахборот тизими жорий қилинган бўлиб, божхонага доир барча процедуралари мазкур тизим орқали амалга оширилади. Тизим мамлакатнинг 99% божхона брокерларини ўзида қамраб олган.

Япония саёҳат агентлиги маълумотларига кўра, 2018 йилда Япониядаги сайёҳлар сони рекорд даражадаги 31,19 миллион нафарга етди ва ҳукумат 2020 йилга келиб, бу кўрсаткич 40 миллион нафарга етказишни кўзлаган. 2018 йил июлдан бошлаб, Токио аэропортида, 2019 йилнинг июлидан бошлаб Чиба, Осака, Фукуока, Аичи, Хоккайдо ва Окинава префектураларидаги бошқа йирик аэропортларда сайёҳларнинг юзидан таниб олиш тизими (Face control) ишга туширилган. Янги тизим инсон юзини сканердан ўтказди ва фотосуратларни саёҳатчилар паспортларида микрочипларда шифрланган фотосуратлар билан таққослайди. Агар тизим маълумотларнинг ўзаро мос эканлигини тасдиқласа, эшиклар автоматик равишда очилади. Мазкур жараён атиги 15 сония вақтни олади.

Жаҳондаги кўп давлатлар Жаҳон савдо ташкилоти (WTO) доирасидаги ташқи савдони тартибга солиш, ҳар томонлама интеграциялашувчи гуруҳларга аъзолик ва келишув-битимлар имзоланишида фаол қатнашмоқда. Жумладан, Япония ҳам эркин савдо битимлари бўйича ASEAN, ASEAN+3, ASEAN+6 ва APEC гуруҳларида фаол.

Япония божхона сиёсатида қуйидаги 5 йўналишда бошқарув кадрларини тайёрлашга устувор аҳамият қаратилмоқда.

1. Хавфсизлик сиёсати йўналиши кадрлари.

Бунда, контрабанда ва терроризмга қарши курашиш учун давлат чегара назоратида замонавий инспекцион жиҳозлар (рентген тизимлари, тегагерц тўлқинли ва биосенсорли илғор технологиялар) жорий этилган. Интеллектуал мулкни ҳимоя қилиш (IPR) учун Япония божхона хизмати қонунчиликни қайта кўриб чиқишни таклиф этмоқда. Шунингдек, атроф муҳит муҳофаза муаммоларини ҳал этишда ҳам фаол қатнашмоқда.

2. Даромадларни ундириш сиёсати йўналиши кадрлари.

Япония божхона хизмати давлат бюджетига божхона тўловларини ундириш билан боғлиқ функцияни ҳам бажаради. 2019 йилнинг 10 ойи давомида жами йиллик истиқбол режа ўртача қарийб 2,1 трлн. иена белгиланган бўлсада унинг 78,2 %ини ёки 1,6 трлн. иен ёки қарийб 15 млрд АҚШ доллар божхона тўловлари ундирилган. Бу эса Япония божхона хизматининг давлат солиқлари бўйича агентлик билан бир қаторда турадиган муҳим бўғин эканлигини кўрсатмоқда.

3. Истеъмолчилар учун божхона хизматларидан фойдаланишда қулайлик сиёсати бўйича кадрлар (маркетологлар).

Япония божхонаси 40 йилдан ортиқ вақт давомида хавфларни бошқариш тизимига асосланган божхона расмийлаштируви тартибидан фойдаланиб келмоқда. 2001 йилда Япония божхона хизмати “Ваколатли иқтисодий оператор” мақомини жорий қилган. Импортёрлар, экспортёрлар ва маълум шартларга жавоб берадиган омбор операторлари учун соддалаштирилган божхона тартиблари жорий этилган. Япония ваколатли иқтисодий операторлар бўйича халқаро шериклик борасида АҚШ, Европа Иттифоқи, Австралия ва Янги Зеландия каби хорижий давлатлар билан ваколатли иқтисодий оператор дастурларининг ўзаро тан олиншини ўрнатиш учун музокаралар олиб бормоқда.

4. Халқаро ҳамкорлик сиёсати бўйича кадрлар.

Япония божхона хизмати ходимлари Жаҳон божхона ташкилотининг фаол иштирокчиси ҳисобланадилар. Жумладан, Жаҳон божхона ташкилотининг ҳозирги бош котиби ҳам япониялик Кунио Микуриядир. Япония, шунингдек, АРЕС, АSEM ва икки томонлама келишувлар каби минтақавий тузилмалар ишларида фаол иштирок этмоқда.

5. Самарали бошқарув сиёсати бўйича кадрлар (менежерлар).

Япония ҳукумати бошқарувни яхшилаш учун устувор таркибий ислоҳотларни амалга оширмоқда. Самарадорликни кафолатлаш ва ўз ҳаракатларининг бажарилишини баҳолаш мақсадида Япония божхона хизмати ҳар йили ўз фаолиятини баҳолаб, натижаларини халққа эълон қилиб бормоқда.

Айни пайтда Япония божхона хизмати норматив-ҳуқуқий асосларни такомиллаштириш, таркибий тузилмалар қайта таъсис этиш, соҳага “Ягона ойна” тамойили асосида янги ахборот тизимларини жорий этиш, юқори технологияли ва самарали инспекцион кўрик мажмуалари, ускуна ва жиҳозлар билан таъминлаш, инсон ресурсларини ривожлантириш, ҳукумат,

иктисодиёт тармоқлари ва таълим муассасалари билан ҳамкорликни мустаҳкамлашга қаратилган ислохотларни амалга оширмоқда.

Япония божхона органларида ходимлар билан ишлашда уларни тайёрлаш ва малакасини ошириб бориш билан кадрлар йўналишида шуғулланилади. Ходимларнинг Япония божхона хизматидаги фаолияти қуйидаги принципларга асосланади: бутун умрлик ишга ёлланмиш, доимий ротация, иш жараёнида узлуксиз тайёрлантириб бориш. Тизимдаги ходимлар жами 8 та иерархияда хизмат олиб боришади, ҳар бир йўналишда 15 та разряд мавжуд. Иерархия ходимларнинг давлат хизматидаги лавозимига қараб бўлинади, разряд ходимнинг хизмат йиллари стажи, мутахассислиги ва унга нисбатан билдирилган тавсифнома асосида фарқланади.

Божхона органларидаги бошқарув фаолияти бошқа давлат органларида бўлгани каби муаммоли вазиятларни олдиндан аниқлаш ва бартараф этишга қаратилган ташкилий-бошқарув тартибдаги чоратadbирларни қўллашдан иборат ҳисобланади. Европа иттифоқиға аъзо давлатларнинг божхона соҳасидаги бошқарув фаолияти бўйича тажрибасини таҳлил қилишда қуйидаги асосий хусусиятларни инобатға олиш лозим: давлатлар ривожланганлик даражаси, тизимда жорий этилган ахборот-технологилари, ходим ва раҳбар муносабатларининг тартибға солиш принциплари.

Шу ўринда, миллий бошқарув тизимини такомиллаштиришда қисқа муддат ичида давлатнинг иқтисодиётини ғарб давлатлари даражасида ўсишиға сабаб бўлган **Хитой Халқ Республикасининг** тажрибасиға таяниш аҳамиятли ҳисобланади. Ўзбекистон Республикаси ҳуқуқни муҳофаза қилувчи органлари фаолиятида бошқарув фаолиятини такомиллаштиришда Хитой Халқ Республикасининг ижобий тажрибасидан фойдаланишнинг аҳамияти юқори ҳисобланади.

Хитойнинг илғор тажрибалари қуйидагилардан иборат:

1. Ҳуқуқни муҳофаза қилиш органларининг бошқарув қарорларини қабул қилишда ходимлар фаолияти устидан назорат тизимини такомиллаштирилган.

2. Бошқарув қарорларини қабул қилишда ғоявий ва тарбиявий ишларни самарали ташкил этиш.

3. Ҳуқуқни муҳофаза қилувчи орган ходимларини хизмат фаолиятининг хусусиятиға кўра профессионал касб маҳоратини ошириб бориш, доимий қайта тайёрлаш, турли муддатлар курсларда малакасини оширишни ташкиллаштириш.

ХУЛОСА

Хулоса ўрнида таъкидлаш жоизки, хорижий тажрибанинг энг илғор ютуғи бошқарув фаолиятида стресс ва муаммоли вазиятларда бошқарув қарорларини қабул қилишда асосий восита кадрлар тайёрлаш тизими билан боғлиқ.

Ҳорижий натижаларига кўра куйидагиларни амалга ошириш мақсадга мувофиқ деб ҳисобланади:

- Божхона институтида йўлга қўйилган “Божхона менежменти” ўқув курсларида бошқарув фаолиятида стресс ва муаммоли вазиятларда бошқарув қарорларини қабул қилиш йўналишида ўқув дарсларини жорий этиш;

- Божхона қўмитасининг Инсон ресурсларини ривожлантириш ва бошқариш бошқармаси томонидан барча таркибий тузилмаларнинг бошқарув фаолиятини назорат қилиш тизимини рақамлаштириш бўйича чора-тадбирларни ишлаб чиқиш;

- раҳбар лавозимига ходимларни саралаш ва тайинлаш жараёнларида “стресс-менежмент” қисқа муддатли курсидан ўтганлик талабини жорий этиш.

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*Эргашев У.А.
преподаватель
кафедра общественных наук и спорта
Ферганский политехнический институт
Республика Узбекистан, г.Фергана*

МОДЕРНИЗАЦИЯ ОБРАЗОВАНИЯ И ПОВЫШЕНИЕ КАЧЕСТВА ОБРАЗОВАНИЯ

Аннотация. В данной статье описано, как обеспечить образовательный процесс педагогическими технологиями, изучить лучшие практики системы образования, применить их в учебном процессе и повысить качество образования.

Ключевые слова: образование, воспитание, «Национальная программа обучения», «Закон об образовании», непрерывное образование, педагогические технологии, инновационные методы.

*Ergashev U.A
lecturer
Department of "Social Sciences and Sports"
Fergana Polytechnic Institute
Republic of Uzbekistan, Fergana*

MODERNIZATION OF EDUCATION AND INCREASING THE QUALITY OF EDUCATION

Annotation. This article describes how to provide the educational process with pedagogical technologies, study the best practices of the education system, apply them to the teaching process and improve the quality of education.

Keywords: education, upbringing, "National Training Program", "Law on Education", continuing education, pedagogical technologies, innovative methods.

Каждая дисциплина имеет свои этапы непрерывного прогресса. Накануне нового исторического этапа, оказывающего существенное влияние на развитие науки, обычно не обходится без масштабных и напряженных дискуссий.

На основе Закона Республики Узбекистан «Об образовании» и «Национальной программы подготовки кадров», а также нормативных документов в виде постановлений правительства, обеспечивающих их реализацию, в нашей стране создан фундамент системы непрерывного образования. Установление управления всеми звеньями непрерывного образования на уровне мировых стандартов и современных требований с

учетом особенностей и возможностей, присущих каждому из них, формирование новой системы образования и воспитания было поставлено на повестку дня как основа развития независимого Узбекистана.

Одним из основных факторов реформирования сферы образования является обеспечение образовательного процесса педагогическими технологиями, изучение лучших практик образовательной системы и применение их в учебном процессе.

Современные педагогические технологии требуют использования методов, воспитывающих у студентов инициативу, самостоятельность, глубокое и тщательное усвоение знаний, наблюдательность, память и творческое воображение.

Поскольку одно из требований «Национальной программы подготовки кадров» - научить студентов мыслить, рассуждать и проявлять творческий подход, мы, специалисты, должны организовывать свои занятия с использованием педагогических технологий и инновационных методов и быть готовыми проводить занятия, исходя из требований сегодняшнего дня.

Второй этап реализации «Национальной программы подготовки кадров» ставит задачу комплексного внедрения педагогических технологий в содержание образования. Это возлагает ответственные задачи на всех педагогов. Ученые нашей республики пытаются создать образовательные технологии, основанные на науке и адаптированные к социально-педагогическим условиям Узбекистана, и использовать их в образовательной практике. В литературе, посвященной педагогике, широко используются и по-разному трактуются такие понятия, как «педагогическая технология», «образовательная технология», «передовая педагогическая технология». В основе термина педагогическая технология лежит системный подход к образовательному процессу, обладающий новыми, уникальными характеристиками. Это означает инновационный подход к образовательному процессу. Организация нового образования означает внедрение в учебный процесс передовых методов и приемов, используемых в практике мировой педагогики, технических средств и форм обучения с учетом индивидуальности, психического своеобразия, интеллектуальных способностей, национальных и социальных особенностей.

Педагогическая технология заставляет смотреть на студента как на субъекта образовательного процесса, то есть как на активного участника, а на преподавателя как на организатора и менеджера этого процесса.

Основными параметрами образования при преподавании педагогической технологии считаются:

- вся образовательная ситуация рассматривается как объект управления;
- управление образованием целенаправленно на развитие духовных сил учащегося;

- образовательный процесс осуществляется демократично, поощряюще;

- необходимым условием образовательного процесса является поддержка личной инициативы обучающегося, открытости личности педагога, их сотрудничества для создания взаимодовверительных отношений.

В заключение можно сказать, что инновационные методы педагогических технологий стремительно и масштабно входят в систему образования. Важнейшим аспектом этого метода является то, что он побуждает студентов стать партнерами, повышает их активность, учит самостоятельно выражать свои мысли, критически мыслить, анализировать, делать выводы. В отличие от традиционных методов обучения, этот метод обеспечивает широкое участие преподавателя и студента в уроке, а в некоторых местах студент более активен, чем преподаватель.

В настоящее время коренные изменения происходят в сфере народного образования в нашей стране. Это требует совершенствования содержания подготовки кадров. Необходимо совершенствовать ораторское мастерство и квалификацию нашей молодежи, чтобы вырастить из нее зрелых специалистов во всех сферах и воспитать из них гармонично развитых личностей.

Поскольку наше время требует правильного выражения мышления и продуктов мысли у нынешнего молодого поколения, нам, педагогам, следует использовать новые методы и методы для развития этих навыков у студентов.

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Эшонқулов А.Қ.
Самарқанд иқтисодиёт ва сервис
институтини “Бухгалтерия ҳисоби”
кафедраси ассистенти

КОРХОНАЛАРДА ПУЛ ОҚИМЛАРИ ТЎҒРИСИДАГИ ҲИСОБОТНИ ТАКОМИЛЛАШТИРИШ

Аннотация. Мақолада пул оқими тушунчаси ҳақида тўхталиб, Бухгалтерия ҳисоботи миллий стандарти унда белгиланган умумий қоидалар, мақсади, амал қилиш соҳаси, пул оқими каби тушунчалар акс этган. Қолаверса, мақолада пул маблағлари оқимининг шаклланиши, ўзлик маблағлари, жалб қилинган маблағлар, қарз маблағлари, оператив пул маблағлари тўғрисида ҳам маълумот келтириб ўтилган. Корхоналарда пул маблағлари оқимини самарали бошқариш ва оптималлаштиришдаги бир қанча тамойиллар келтириб ўтилган.

Калит сўзлар: пул оқими, актив, активлар гуруҳи, маблағлар оқими, эквивалент, ҳисобот, молиявий аҳвол, баҳолаш, субъект, ўзлик маблағлари, жалб қилинган маблағлар, қарз маблағлари, оператив пул маблағлари, фойда, прогнозлаш, бозор муносабатлари, устав капитали, мулк эгалари, иқтисодий ўсиш, бизнес, мулк.

Eshankulov A.K.
assistant
"Accounting" department
Samarkand Institute of Economics and Services

IMPROVING BUSINESS STATEMENT OF CASH FLOWS

Abstract. The article focuses on the concept of cash flow, and the national accounting reporting standard reflects concepts such as general rules, purpose, scope, and cash flow. In addition, the article provides information on the formation of cash flow, equity funds, borrowed funds, debt funds, operational funds. Several principles of effective management and optimization of cash flow in enterprises are mentioned.

Keywords: cash flow, asset, asset group, cash flow, equivalent, statement, financial position, valuation, entity, equity, borrowed funds, debt, operating cash, profit, forecasting, market relations, share capital, property owners, economic growth, business, property.

Жамиятимизда иқтисодиёт соҳасини ривожлантириш борасида бир қанча ислохотлар амалга оширилмоқда. Бу борада иқтисодий ўсиш, бизнес, шунингдек, тадбиркорлик фаолиятини кўллаб –қувватлаш орқали кўплаб

натижаларга эришилди. Бозор муносабатлари шароитида пул маблағларидан оқилона фойдаланиш, айниқса, корхоналарда пул маблағлари оқимини ошириш муҳим аҳамият касб этади.

Республикада 2017-2021 йилларда ривожланишининг бешта устувор йўналишлари бўйича Ҳаракатлар стратегиясида кичик бизнес ва хусусий тадбиркорлик, хусусан, корхоналарнинг ишлаб чиқариш салоҳияти ва қийматини оширишдаги вазифалари алоҳида белгилаб берилган эди. Ушбулар ижросини амалда тадбиқ этиш юзасидан бир қанча муҳим вазифалар белгилаб берилиб, аниқ мақсад ва вазифалар амалга оширилиб келинмоқда. Мамлакатимизда иқтисодиёт соҳасини ривожлантириш, корхоналарда пул маблағлари ҳажмини ошишига, шунингдек, пул маблағлари оқимини прогнозлаш муҳим вазифалардан биридир.

Ўзбекистон Республикаси Давлат мулкни бошқариш давлат қўмитасининг қарорининг илова қисмида 1-боби яъни, Умумий қоидаларида пул оқими тушунчасига алоҳида тўхталиб ўтилган.²⁵⁹

Яъни, пул оқими-муайян давр мобайнида актив, активлар гуруҳи, корхона томонидан яратиладиган пул маблағлари оқими деб келтириб ўтилган.

Пул оқими тўғрисидаги ҳисобот Ўзбекистон Республикаси Бухгалтерия ҳисоботи миллий стандарти 9-сон БҲМС да Умумий қоидалари, мақсади, амал қилиш соҳаси, пул оқими, ҳаракати тўғрисидаги ахборотни, билиш фойдалилиги, тушунчалар, пул маблағи ва эквивалентлари пул оқимлари тўғрисидаги ҳисоботни тақдим этиш қабилар тўғрисида алоҳида қайд этилган.²⁶⁰ Ушбудан келиб чиқиб, пул оқимлари тўғрисидаги ҳисобот ундан фойдаланувчиларга хўжалик юритувчи субъектнинг молиявий аҳволидаги ўзгаришларни баҳолашга имкон беради.

Ўзбекистон Республикаси Молия Вазирининг “Молиявий ҳисобот шакллари ва уларни тўлдириш бўйича қоидаларни тасдиқлаш тўғрисида”ги буйруғи²⁶¹ пул оқимлари тўғрисидаги ҳисобот, хусусий капитал тўғрисидаги ҳисобот қабилар алоҳида келтириб ўтилган.

Корхоналарда пул маблағлари оқимининг иқтисодий моҳияти, асосий хусусиятлари, корхона пул маблағларидан самарали фойдаланиш, корхонанинг пул маблағлари оқимини шаклланиши асосий вазифалардир.

Пул маблағлари ҳаракати ҳисоботи молиявий ҳисоботнинг умумлашган даромад, молиявий ҳолат ва капиталдаги ўзгаришлар тўғрисидаги ҳисоботлар қаторидаги асосий ҳисоботларидан бири ҳисобланади.

Корхонанинг пул маблағлари оқимини шаклланиши, ўзлик маблағлари, жалб қилинган маблағлар, қарз маблағлари, оператив пул маблағлари асосий ўринга эга.

²⁵⁹ Ўзбекистон Республикаси давлат мулки қўмитасининг 2009 йил 6 октябрдаги 01/19-18/19 сон қарори

²⁶⁰ Ўзбекистон Республикаси Адлия вазирлиги 1998 й. 4 ноябрь 519 сон.

²⁶¹ Ўзбекистон Республикаси Молия вазирининг 2002 йил 27 декабрдаги 140-сон буйруғи

Ушбу тушунчалар ҳақида тўхталиб ўтарканмиз, пул маблағлари ва уларнинг эквивалентлари таокибидаги ўзгаришлар хусусида ҳам фикр юритиш жоиз. Ушбулар бўйича қуйидагиларни келтиришимиз жоиз:

Пул маблағлари ҳисобот даврида пул маблағлари ва ларнинг эквивалентлари таркибидаги ўзгаришлар тўғрисидаги маълумотларни, ҳисобот давридаги ўзгаришлар тўғрисидаги маълумотларни, ҳисобот давридаги пул оқимларини операцион, инвестиция ва молиявий фаолиятлар бўйича таснифлаш орқали ёритиб беради.

Юқорида корхонанинг пул маблағлари оқимини шаклланиши асосий ўринга эга эканлиги таъкидланиб ўтилди. Ушбулар бўйича маълумот бериб ўтсак. Ўзлик маблағларига (устав капитали, қўшимча капитал, резерв капитали, тақсимланмаган фойда, амортизация фонди, жамғарма фонди), жалб қилинган маблағларга (қимматли қоғозлар эмиссиясидан шаклланган фонд, дивидендлар бўйича ҳисоботлар, келгуси давр даромадлари, кутиладиган харажатлар резервлари), қарз маблағлари (банк кредитлари, кредиторлик қарзлари, факторинг, лизинг ва бошқа фондлар), оператив пул маблағлари (меҳнат фонди тўлаш учун фонд, дивидендлар тўлаш учун фонд, бюджетга тўловлар ва бошқалар учун).

Корхона ўз фаолиятини бошлашда зарур бўлган мулкни сотиб олишни ҳамда ишлаб чиқаришни юритишни молиялаштирадиган асосий манба бўлиб корхонанинг устав капитали шаклида жамғариладиган мулк эгалари маблағлари корхонада белгиланган тартибда шаклланган бошқа капиталлар ҳамда таъсисчиларнинг ишлаб чиқаришни кенгайтириши учун қолдирган фойдалари ҳисобланади.

Корхоналарда пул оқими тушунчаси корхона тижорат фаолиятининг соф пулли натижаси сифатида ифодаланиб, улар ҳаракатланишининг йўналиши бўйича, тушумларнинг тавсифлари бўйича, гуруҳларга ажратиш мумкин.

Пул оқими ўз ҳаракатининг йўналиши бўйича пул маблағлари кирими, пул маблағлари чиқимига ажратилса, тушумлар тавсифи бўйича бир хил ва доимий равишда бўлмаган тушуми пул оқими, бир хил бўлган лекин доимий равишда бўлмаган тушуми пул оқими, бир хил миқдордаги ва доимий бир муддатда ташувчи пул оқими, ҳар қандай молиявий битимда мақсад икки йўналишдаги пул оқими тўғрисида боради, 1. Ҳозирдан келгусига томон, 2. Келгусидан ҳозирга томон.

Корхоналарда пул маблағлари оқимини самарали бошқариш ва оптималлаштиришда ахборотларнинг ишончилиги тамойили, баланслаштирилиш тамойили, самарадорликни таъминлаш тамойили, ликвидликни таъминлаш тамойили каби тамойиллар орқали амалга оширилади.

Корхоналар бошқарув сиёсатида пул оқимларини бошқариш муҳим аҳамиятга эга. Жумладан, корхоналарда пул маблағларидан самарали фойдаланиш мақсадида пул маблағларини бошқариш сиёсатини ишлаб

чиқиш, пул маблағларига бўлган зарур минимал эҳтиёжни аниқлаш, маълум бир белгиланган муддатда пул маблағлари қолдиғининг тебраниш диапазонини аниқлаш, пул маблағларига бўлган эҳтиёжни максимал даражада камайтириш мақсадида тўлов оқимларини тўғирлаш, пул маблағларининг тез айлаувчанлигини таъминлаш, вақтинчалик бўш пул маблағларининг рентабеллигини таъминлаш кабилардир.

Айнан пул оқимларини бошқариш ва ундан самарали фойдаланишда фақатгина пул маблағларига бўлган эҳтиёжни аниқлаш, вақтинчалик бўш пул маблағларининг рентабеллигини таъминлаш кабилардан билан биргаликда, корхоналар бошқарув сиёсатида пул оқимларини бошқариш муҳим аҳамиятга эгадир.

Корхоналар бошқарув сиёсатида пул оқимларини бошқаришни самарали йўлга қўйиш орқали юқорида келтириб ўтилган жараёнлар шаклланиб боради.

Корхоналарда пул оқимларини бошқариш молиявий фаолиятни янада ривожлантиришдан иборатдир.

Корхоналар қийматини бошқариш, инвестицияларни жалб қилишга доир изланиш ва тадқиқотлар А.Маршалл²⁶², Ж.Милл, Д.Рикардо²⁶³, А.Смит²⁶⁴ каби вакиллар шуғулланган.

Юқоридагилардан хулоса ва таклиф сифатида қуйидагиларни келтириш мақсадга мувофиқ:

Пул оқимлари ҳажмига ва уларнинг вақт бўйича шаклланиш характерига таъсир этадган омилларни ҳисобга олиш;

Корхоналарда пул оқимларини самарали бошқаришни йўлга қўйиб бориш;

Корхоналарда пул оқимларидан самарали фойдаланиш бўйича аниқ механизмлар ишлаб чиқиш;

Пул оқимлари ва уларни шакллантиришда аниқ чора-тадбирлар режасини ишлаб чиқиш;

Ушбулар бўйича халқаро стандартларга мос равишда тажрибалар алмашишни йўлга қўйиш;

Корхона айланма маблағларини фоизли ва фоизсиз қарзлар олиш орқали тўлдириш;

Устав фондини купайтириш орқали корхонанинг айланма маблағларини тўлдириш;

Савдо мақсадларида бир қанча шартномалар тузишни йўлга қўйиш;

Товарларни сотиш ва хизматларни кўрсатишдан пул маблағларининг келиб тушиши;

²⁶² Маршалл А. Принципы экономической науки. Т.1 и 2. –Изд РОО,1996

²⁶³ Милл Дж. Основы политической экономии. Пер с англ.-Т.1-3.-М:Прогресс,1980-1981

²⁶⁴ Рикардо Д. Начало политической экономии и налогового обложения. Том 1. Пер.с.англ.-М.:Госполитиздат,1955

Молиявий ёки инвестиция фаолиятига аниқ тегишли бўлмаган фойда солиғи бўйича пул маблағларининг тўлови ёки уларнинг қайтарилиши

Ушбу таҳлиллар, изланишлар шуни кўрсатадики, корхоналарда пул оқимларидан самарали бошқариш, корхона айланма маблағларини фоизли ва фоизсиз қарзлар олиш орқали тўлдириш, устав фондини купайтириш орқали корхонанинг айланма маблағларини тўлдириш, савдо мақсадларида бир қанча шартномалар тузишни, йўлга қўйиш, молиявий ёки инвестиция фаолиятига аниқ тегишли бўлмаган фойда солиғи бўйича пул маблағларининг тўлови ёки уларнинг қайтарилиши кабилар орқали корхоналарда пул оқимлари жараёнини янада такомиллаштириш сифатида қараш мумкин ва ушбу таклиф ва тавсиялар орқали такомиллаштириш мумкин.

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Эшанкулов А.К.
ассистент
кафедра «Бухгалтерский учет»
Самаркандский институт экономики и сервиса

УЛУЧШЕНИЕ ОТЧЕТА О ДЕНЕЖНЫХ ПОТОКАХ

Аннотация. В статье рассмотрено понятие движения денежных средств, а в национальном стандарте бухгалтерской отчетности отражены такие понятия, как общие правила, цель, объем и движение денежных средств. Кроме того, в статье представлена информация о формировании денежных потоков, фондов акционерного капитала, заемных средств, заемных средств, операционных фондов. Упомянуты некоторые принципы эффективного управления и оптимизации денежных потоков на предприятиях.

Ключевые слова: денежный поток, актив, группа активов, денежный поток, эквивалент, отчет, финансовое положение, оценка, предприятие, собственный капитал, заемные средства, долг, операционные денежные средства, прибыль, прогнозирование, рыночные отношения, акционерный капитал, собственники недвижимости, экономический рост, бизнес, недвижимость.

Eshankulov A.K.
assistant
Department of Accounting
Samarkand Institute of Economics and Service

IMPROVING CASH FLOW REPORTING

Abstract. The article discusses the concept of cash flow, and the national accounting standard reflects such concepts as general rules, purpose, volume and cash flow. In addition, the article provides information on the formation of cash flows, equity funds, debt funds, borrowed funds, operating funds. Some principles of effective management and optimization of cash flows in enterprises are mentioned.

Key words: cash flow, asset, group of assets, cash flow, equivalent, report, financial position, valuation, enterprise, equity capital, borrowed funds, debt, operating cash, profit, forecasting, market relations, share capital, real estate owners, economic growth, business, real estate.

В нашем обществе реализуется ряд реформ, касающихся развития экономического сектора. В этом отношении многие результаты были достигнуты за счет поддержки экономического роста, бизнеса и

предпринимательства. В условиях рыночных отношений важно разумно использовать деньги, особенно для увеличения денежного потока на предприятиях.

В Стратегии действий по пяти приоритетным направлениям развития нашей республики на 2017-2021 годы определены задачи малого бизнеса и частного предпринимательства, в частности, по повышению производственного потенциала и стоимости предприятий. Одной из важных задач является развитие экономического сектора в нашей стране, увеличение объема денежных средств на предприятиях, а также прогнозирование движения денежных средств.

Глава 1 приложения к решению Государственного комитета по управлению государственным имуществом Республики Узбекистан, то есть Общих правил, конкретно посвящена понятию движения денежных средств.²⁶⁵

То есть денежный поток определяется как поток денежных средств, созданный активом, группой активов, предприятием в течение определенного периода.

Отчет о движении денежных средств в национальном стандарте бухгалтерской отчетности Республики Узбекистан №9 ВНМС Общие правила, назначение, сфера применения, информация о движении денежных средств, движении, полезности знаний, понятий, денежных средств и их эквивалентов и т.д. выполнено ²⁶⁶На основании этого отчет о движении денежных средств позволяет его пользователям оценить изменение финансового положения экономического субъекта.

Приказ Министра финансов Республики Узбекистан «Об утверждении форм финансовой отчетности и правил ее заполнения» ²⁶⁷включает в себя отчет о движении денежных средств, отчет о частном капитале и т.д.

Основными задачами являются экономическая природа денежного потока на предприятии, его основные особенности, эффективное использование денежных средств предприятия, формирование денежного потока предприятия.

Отчет о движении денежных средств является одним из основных отчетов финансовой отчетности наряду с отчетами о совокупном доходе, финансовом положении и изменениях в собственном капитале.

Формирование денежного потока компании, основное место занимают собственные средства, заемные средства, заемные средства, операционные средства.

²⁶⁵ Постановление Госкомимущества Республики Узбекистан от 6 октября 2009 года №19-18/19 01/19.

²⁶⁶ Министерство юстиции Республики Узбекистан в 1998 году. 4 ноября, 519 выпусков.

²⁶⁷ Приказ Министра финансов Республики Узбекистан от 27 декабря 2002 года №140.

Пока мы останавливаемся на этих понятиях, допустимо также подумать и об изменении стоимости денег и их эквивалентов. В отношении них можно отметить следующее:

Денежные средства предоставляют информацию об изменении структуры денежных средств и их эквивалентов в течение отчетного периода, информацию об изменениях в течение отчетного периода, путем классификации потоков денежных средств в отчетном периоде по операционной, инвестиционной и финансовой деятельности.

Выше подчеркивалось, что основное место имеет формирование денежного потока предприятия. Дадим информацию об этом. Собственные средства (уставный капитал, добавочный капитал, резервный капитал, нераспределенная прибыль, фонд амортизации, резервный фонд), заемные средства (фонд, сформированный за счет выпуска ценных бумаг, отчетов о дивидендах, будущих доходах, резервы на ожидаемые расходы), заемные средства (банковские кредиты, кредиторская задолженность, факторинговые, лизинговые и другие фонды), операционные фонды (фонд оплаты труда, фонд выплаты дивидендов, платежей в бюджет и т. д.).

Средства собственников, аккумулированные в виде уставного капитала предприятия, представляют собой прочие капиталы, сформированные в установленном порядке, и прибыль, оставленную учредителями на расширение производства.

Понятие денежного потока на предприятиях выражается как чистый денежный результат коммерческой деятельности предприятия и может быть разделен на группы по направлению их движения, по описанию доходов.

Если денежный поток разделить на приток и отток денежных средств по направлению его движения, по описанию доходов, денежный поток с одинаковым и непостоянным доходом, денежный поток с одинаковым, но непостоянным доходом, денежный поток, несущий одну и ту же сумму и в постоянный период. В любой финансовой операции целью является двусторонний денежный поток: 1. Из настоящего в будущее, 2. Из будущего в настоящее.

Эффективное управление и оптимизация денежных потоков на предприятиях осуществляется посредством таких принципов, как принцип достоверности информации, принцип сбалансированности, принцип обеспечения эффективности и принцип обеспечения ликвидности.

Управление денежными потоками играет важную роль в управленческой политике предприятий. В частности, в целях эффективного использования денежных средств на предприятиях разработать политику управления денежными средствами, определить необходимую минимальную потребность в денежных средствах, определить диапазон колебаний остатка денежных средств в определенный фиксированный период, скорректировать платежные потоки в порядке минимизировать

потребность в средствах, обеспечить быстрый оборот средств, например, обеспечить доходность временно простаивающих средств.

Именно в управлении денежными потоками и их эффективном использовании, а также определении потребности в денежных средствах, обеспечении доходности временно свободных средств, управление денежными потоками имеет важное значение в управленческой политике предприятий.

Вышеуказанные процессы формируются за счет эффективного управления денежными потоками в управленческой политике предприятий.

Управление денежными потоками на предприятиях заключается в дальнейшем развитии финансовой деятельности.

Такие представители, как А.Маршалл, Дж.Милл, Д.Рикардо²⁶⁸ и А.Смит, занимались²⁶⁹ исследованиями и исследованиями управления стоимостью предприятия, привлечения инвестиций.²⁷⁰

Из вышеизложенного в качестве вывода и предложения уместно процитировать следующее:

Учет факторов, влияющих на размер денежных потоков и характер их формирования во времени;

Наладить эффективное управление денежными потоками на предприятиях;

Разработка конкретных механизмов эффективного использования денежных потоков на предприятиях;

Разработка плана конкретных мероприятий по денежным потокам и их формированию;

Налаживание обмена опытом в соответствии с международными стандартами;

Пополнение оборотного капитала компании за счет получения процентных и беспроцентных кредитов;

Пополнение оборотного капитала предприятия за счет увеличения уставного фонда;

Заключение нескольких контрактов в коммерческих целях;

Приток средств от реализации товаров и оказания услуг;

Уплата или возврат подоходного налога, который явно не связан с финансовой или инвестиционной деятельностью

Данные анализы, исследования показывают, что эффективное управление денежными потоками на предприятиях, пополнение оборотных средств предприятия за счет получения процентных и беспроцентных кредитов, пополнение оборотных средств предприятия за счет увеличения уставного фонда, заключения нескольких договоров в торговых целях,

²⁶⁸ Милль Дж. Основы политической экономики. Перс англ.-Т.1-3.-М:Прогресс, 1980-1981 гг.

²⁶⁹ Рикардо Д. Начало Политическая экономия и экономическое развитие. Том 1. Пер.с.англ.-М.: Госполитиздат, 1955.

²⁷⁰ Маршалл А. Основы экономической науки. Т.1.и 2. -Изд РОО, 1996 г.

создания, не связанные явно с финансовой или инвестиционной деятельностью, могут рассматриваться как дальнейшее совершенствование процесса движения денежных средств на предприятиях за счет уплаты средств по налогу на прибыль или их возврата и могут быть улучшены с помощью данных предложений и рекомендаций.

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*Эшонкулова М.Н.
ассистент
Джизакский политехнический институт*

ОБЕСПЕЧЕНИЕ ТОЧНОСТИ И КАЧЕСТВА ИЗГОТОВЛЕНИЯ ДЕТАЛЕЙ В МАШИНОСТРОЕНИИ С ПОМОЩЬЮ КОНТРОЛЬНЫХ КАЛИБРОВ

Аннотация. В статье рассмотрено повышение точности и качества изготовления деталей, калибры измерительных инструментов, системы допусков и посадок ИСО и ЕСДП, качество точности, погрешность измерения.

Ключевые слова: качества, степень соответствия, точность, калибры, качества, конструкция, нормативные документы.

*Eshonkulova M.N.
assistant
Jizzakh Polytechnic Institute*

ENSURING PRECISION AND QUALITY OF MANUFACTURING PARTS IN MECHANICAL ENGINEERING USING CONTROL CALIBRES

Annotation. The article discusses the improvement of the accuracy and quality of manufacturing parts, the calibers of measuring instruments, the ISO and ESDP tolerance and fit systems, the quality of accuracy, and measurement error.

Keywords: quality, degree of compliance, accuracy, calibers, qualifications, design, regulatory documents.

Точность и качества изготовления деталей – это степень соответствия ее показателей параметрам, заданным конструктором в рабочей чертеже и техническим условиям детали. Соответствие реальной и заданной конструктором деталей определяется факторами: определяемым точностью, шероховатостью и физико-механическими свойствами. Для обеспечения высокого качества и надежности машин необходимо обеспечивать точность их изготовления. Повышение точности и качества изготовления деталей сокращает трудоемкость сборки машин способствует достижению взаимозаменяемости элементов машин и обеспечивает возможность сокращения срока ремонта машин. Калибры были одним из первых измерительных инструментов, применяемых при изготовлении деталей и механизмов машин, главным образом, сопрягаемых деталей, например, ствола ружья и пули, вала и втулки, винта и гайки и т.п. Калибр не является

измерительным средством. С его помощью нельзя определить размер детали. Можно определить только ее пригодность для сборки с другой деталью. Калибры были доминирующим измерительным инструментом в машиностроительном производстве в течение долгого времени. Они изготавливались инструментальными заводами, специализированными фирмами и машиностроительными заводами. Однако, для организации производства калибры чрезвычайно неудобный инструмент. На инструментальных складах машиностроительных заводов хранились сотни, а иногда и тысячи калибров, так как каждый калибр годен для контроля только одного размера детали.

Кроме того, для проверки годности калибров необходимы были контракалибры. Калибры быстро изнашивались, иногда в течение одной смены, и их приходилось ремонтировать и аттестовать. Также следует иметь в виду, что калибры только сортировали изготовленные детали на годные и брак, но не определяли их действительные размеры. Калибры мало пригодны для настройки станков, так как не показывают размер детали. Поэтому с появлением механических, пневматических, электронных и оптических измерительных приборов, и построенных на их базе контрольных приспособлений и измерительных устройств применение калибров на производстве стало быстро сокращаться. На практике для определения точности пользуются квалитетами точности, которые устанавливаются на отдельные параметры деталей и на изделия в целом. В зависимости от предъявляемых к машине требований, а также условий работы деталей в узле и узлов в машине назначают точность изготовления деталей. Различают: точность формы; точность размеров детали; точность взаимного расположения поверхностей. Точность характеризует наряду с геометрическими параметрами изделия и единообразие качественных показателей, таких как мощность, производительность и др. Более точно изготовленные машины имеют более узкое поле разброса этих показателей и более высокие эксплуатационные качества. Точность и качества изготовления детали зависят от комплекса технологических процессов, применяемых в данном производстве. Системы допусков и посадок ИСО и ЕСДП для типовых деталей машин построены по единым принципам и распространяются на размеры до 20 000 мм. Эта область размеров разбита на четыре диапазона: до 1 мм; от 1 мм до 500 мм (наиболее распространенный); от 500 мм до 3150 мм; от 3150 мм до 10 000 мм. Для удовлетворения потребностей различных отраслей промышленности в ЕСДП предусмотрено 19 квалитетов точности, которые обозначаются 01, 0, 1, 2, 17.

Квалитет — это совокупность допусков, соответствующих одинаковой относительной точности для разных номинальных размеров. Квалитет в переводе означает «степень точности» (точнее «степень качества»).

Квалитеты 01, 0, 1, 2, 3, 4 применяются при изготовлении образцовых мер и калибров, квалитеты с 5-го по 11-й – для сопрягаемых элементов деталей, а квалитеты с 12-го по 18-й – для несопрягаемых элементов деталей. Конструкция, теория и нормативные документы (ГОСТы, международные стандарты ISO) на калибры гладкие и резьбовые были подробно разработаны

на основе системы допусков и посадок. В настоящее время лишь в некоторых областях машиностроения, когда контроль размеров изделий приборами затруднен, например, при контроле валов и отверстий малого диаметра (менее 10 мм), при контроле конусов и при контроле резьбовых деталей, применяют калибры. Однако, для измерения валов и отверстий малого диаметра применен оригинальный способ контроля с помощью набора очень точно изготовленных калибров, размеры которых отличаются на очень небольшую величину. Так, выпускают наборы калибров с разницей размеров в 1,0 или 2,0 мкм. Для измерения отверстий диаметром от 0,5 до 10 мм выпускают наборы предельных и прецизионных гладких калибров-пробок с шагом по диаметру пробки 1,0; 2,0 и 10,0 мкм. Допуск на диаметр калибра-пробки составляет $\pm 0,4$ мкм, а для эталонных калибров-пробок $\pm 0,15$ мкм. Длина рабочей части пробок составляет от 1,0 до 50 мм. Шероховатость поверхности R_a менее 0,1 мкм. Калибры-пробки изготавливают также из твердого сплава. Для измерения валов диаметром от 0,06 до 30 мм выпускают калибры-кольца с шагом размера 1,0 мкм. Допуск на диаметр составляет $\pm 1,25$ мкм. Калибры-кольца изготавливают из легированной стали с рабочей поверхностью, закаленной до твердости HRC=60-62. Калибры-кольца изготавливают также из твердого сплава. С помощью наборов таких точных калибров с шагом диаметров, например, 1,0 мкм можно не только сортировать детали на годные и брак, но и практически достаточно точно определить их диаметр, потому что можно подобрать калибр диаметром очень близким к размеру контролируемой детали, например, с точностью 1-2 мкм. Однако во всех случаях предельно допустимая погрешность измерения прецизионными калибрами будет не менее 2,0 мкм. Это точнее, чем при измерении малых размеров универсальными средствами, например, нутромерами, но значительно проще и удобнее. Еще одна область применения калибров, которая сохранилась в настоящее время – контроль внутренней и наружной резьбы различного назначения. Существуют приборы для контроля отдельных параметров резьбы – наружного, внутреннего и среднего диаметра резьбы, шага резьбы, высоты профиля, погрешности винтовой линии, угла профиля, конусности (для конической резьбы) и др. Но эти приборы полезны при настройке станков и при контроле точной резьбы (ходовые винты, микровинты и т.п.), но они не всегда обеспечивают свинчиваемость сопрягаемых деталей, прочность и герметичность резьбового соединения. Конечно, можно произвести точное измерение резьбы с помощью

координатно-измерительной машины или современных оптических приборов (микроскопа или проектора), но это не всегда возможно даже в производственных условиях и тем более невозможно в условиях эксплуатации. Поэтому для комплексной проверки резьбовых деталей широко применяют резьбовые калибры (резьбовой калибр-пробка и резьбовой калибр-втулка). Особенно важное значение имеет контроль резьбы на концах нефтегазовых труб, потому что от качества этой резьбы зависит прочность и надежность соединений труб в том числе, опускаемых в скважину. Поэтому основным средством приемки резьбовых изделий остается контроль с помощью калибров. В заключении следует отметить, что достоинством современных резьбовых калибров является то, что их изготавливают на точных резьбошлифовальных станках с ЧПУ, позволяющих получить отклонение от круглости 0,5-1,0 мкм и шероховатость $Ra = 0,1$ мкм, Резьбовые калибры аттестуют с высокой точностью по всем параметрам резьбы на координатно-измерительных машинах.

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*Эшанкулова М.Н.
ассистент
Джизакский политехнический институт*

МЕТРОЛОГИЧЕСКИЕ ХАРАКТЕРИСТИКИ В НЕФТЯНОЙ ПРОДУКЦИИ

Аннотация. В статье рассмотрены технологические процессы, контроль и качество выпускаемой продукции, интенсификация добычи нефти, определенные виды погрешностей, изменение давления, температуры, химического состава воды и прогрессирующее обводнение продукции.

Ключевые слова: измерения, качество, технологические процессы, процесс добычи нефти, изменение давления.

*Eshankulova M.N.
assistant
Jizzakh Polytechnic Institute*

METROLOGICAL CHARACTERISTICS IN PETROLEUM PRODUCTS

Annotation. The article discusses technological processes, control and quality of products, intensification of oil production, certain types of errors, changes in pressure, temperature, chemical composition of water and progressive watering of products.

Key words: Measurements, quality, technological processes, oil production process, pressure changes.

В практической жизни человек всюду имеет дело с измерениями. На каждом шагу встречаются измерения таких величин, как длина, объем, вес, время и др. Измерения являются одним из важнейших путей познания природы человеком. Они дают количественную характеристику окружающего мира, раскрывая человеку действующие в природе закономерности. Все отрасли техники не могли бы существовать без развернутой системы измерений, определяющих как все технологические процессы, контроль и управление ими, так и свойства и качество выпускаемой продукции. Измерения выполняют уникальную функцию получения информации о ходе разработки, производства и эксплуатации изделий в структуре обеспечения качества. Возможность применения результатов измерений для правильного и эффективного решения любой измерительной задачи определяется следующими тремя условиями:

а) результаты измерений выражаются в узаконенных (установленных законодательством Узбекистана) единицах;

б) известны с необходимой заданной достоверностью значения показателей точности результатов измерений;

в) значения показателей точности обеспечивают оптимальное в соответствии с выбранными критериями решение задачи, для которой эти результаты предназначены (результаты измерений получены с требуемой точностью).

Велико значение измерений в современном обществе. Они служат не только основой научно-технических знаний, но имеют первостепенное значение для учета материальных ресурсов и планирования, для внутренней и внешней торговли, для обеспечения качества продукции, взаимозаменяемости узлов и деталей и совершенствования технологии, для обеспечения безопасности труда и других видов человеческой деятельности. Особенно возросла роль измерений в век широкого внедрения новой техники, развития электроники, автоматизации, атомной энергетики, космических полетов. Высокая точность управления полетами космических аппаратов достигнута благодаря современным совершенным средствам измерений, устанавливаемым как на самих космических аппаратах, так и в измерительно-управляющих центрах. Интенсификация добычи нефти привела к значительным изменениям условий эксплуатации скважинных насосных установок, при этом постоянно растет число различных осложняющих факторов. Для проведения метрологических характеристик нам необходимо учитывать определенные виды погрешностей и создавать расчет на основании тех данных, которые мы получали в процессе экспериментов. Для проведения измерительного эксперимента необходимы особые технические средства – средства измерений. Результатом измерения является оценка физической величины в виде некоторого числа принятых для нее единиц. Измерение физической величины (measurement) – совокупность операций по применению технического средства, хранящего единицу физической величины, обеспечивающая нахождение соотношения (в явном или неявном виде) измеряемой величины с ее единицей и получение значения этой величины. Несмотря на то, что измерения непрерывно развиваются и становятся все более сложными, метрологическая сущность остается неизменной и сводится к основному уравнению измерения:

$$Q = X[Q]$$

где Q – измеряемая величина;

X – числовое значение измеряемой величины в принятой единице измерения;

$[Q]$ – выбранная для измерения единица.

В зависимости от того, на какие интервалы разбита шкала, один и тот же размер представляется по-разному. Применение различных единиц в процессе измерения приводит только к изменению численного значения результата измерения. Цель измерения – получение определенной

физической величины в форме наиболее удобной для пользования. Любое измерение заключается в сравнении данной величины с некоторым ее значением, принятым за единицу сравнения. В свою очередь, изменение давления, температуры, химического состава воды и прогрессирующее обводнение продукции добывающих скважин вызвало интенсивное солеотложение на оборудование и интерес со стороны метрологов исследователей, заинтересованных в уменьшении коэффициента погрешности в солевом растворе при добычи нефти. В процессе добычи нефти возможно отложение нескольких видов солей, которые можно классифицировать по различным признакам: растворимости, скорости образования, трудности удаления, частоте присутствия.

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Юсупов Б.Н.
*старший преподаватель
кафедра картографии
факультет географии и геоинформационных систем
Национальный университет Узбекистана*
Муминов А.А., доктор философии (PhD) по географическим наукам
*заведующий кафедрой общепрофессиональных наук
факультет туризм
Alfraganus University*

МЕТОДОЛОГИЯ КАРТОГРФИРОВАНИЯ ПЕРЕМЕЩЕНИЯ НАСЕЛЕНИЯ

Аннотация. В статье рассматриваются проблемы карты населения и миграции населения, а карты создаются в программах ГИС. Проанализированы статистические данные о естественном и механическом движении населения Республики Узбекистан, даны предложения и рекомендации по выбору методов картографического изображения для картирования естественного и механического движения населения.

Ключевые слова. Население, естественное и механическое движение, миграция, промилле, коэффициент, программы ГИС, масштаб, статистика, картографирование.

Yusupov B.N.
*senior lecturer
Department of Cartography
Faculty of Geography and geographic information systems
National university of Uzbekistan*
Muminov A.A., doctor of philosophy (PhD) in geographical sciences
*Head of the department of General professional sciences
Faculty of Tourism
Alfraganus University*

METHODOLOGY FOR MAPPING POPULATION DISPLACEMENTS

Annotation. The article discusses the problems of population maps and population migration, and maps are created in GIS programs. Statistical data on the natural and mechanical movement of the population of the Republic of Uzbekistan is analyzed, proposals and recommendations are given for the selection of cartographic image methods for mapping the natural and mechanical movement of the population.

Keywords. Population, natural and mechanical movement, migration, per thousand, coefficient, GIS programs, scale, statistics, mapping.

Введение. В настоящее время естественное и механическое перемещение населения считается одним из актуальных и важных направлений экономики. Внешняя трудовая миграция играет все более важную роль в общем миграционном процессе. Трудовая миграция или миграционные движения, связанные с занятостью населения, является одним из наиболее распространенных проявлений современных миграционных процессов.

Основная часть. Хотя миграция населения была свойственна людям с древнейших времен, в современное время она проявляется в совершенно новой форме по своей сути и масштабам. По данным 2022 года, всего в мире мигрантами считаются более 280 миллионов человек. Они составляют 3,6% населения мира, из них 135 миллионов женщин и 146 миллионов мужчин. За исключением беженцев, наибольшую часть из них составляют трудовые мигранты, большая часть которых – мигранты, направляющиеся в развитые страны и крупные города (мегаполисы).

В процессах трудовой миграции населения Узбекистана, в частности, можно наблюдать, что отрицательное сальдо баланса внешней трудовой миграции постепенно сокращается. Стоит отметить, что изучение естественного движения и миграционных процессов населения становится все более актуальным сегодня, когда мировая экономика совершенствуется. Создание множества новых рабочих мест в развитых странах мира, рост спроса на трудовых мигрантов также вызвали резкие изменения в тенденциях миграционных процессов.

Высокие масштабы и скорость миграции в странах мира, без сомнения, являются одной из отличительных особенностей текущего периода, существенно определяющей состояние занятости, рынка труда и уровня безработицы. Именно поэтому миграция населения во многих странах все больше привлекает внимание демографов, социологов, этнографов, экономистов, географов, историков, медицинских работников и т. д., поскольку в процесс перемещения вовлекается все больше трудовые ресурсы.

Трудовые ресурсы являются основной трудоспособной частью населения страны, они выполняют широкий спектр работ в народном хозяйстве своим физическим развитием, умственными способностями и знаниями.

Общие коэффициенты естественного и механического движения населения Узбекистана. Расчет общих коэффициентов естественного и механического движения населения Узбекистана. По данным 2022 года численность населения Узбекистана на начало года $C_0 = 35\,271,3$ тыс. человек и на конец года $C_1 = 36\,024,9$ тыс. человек, число родившихся $P =$

932,217 тыс. человек, численность смертей составляет $C = 172,068$ тыс. человек. Иммигрировало 214,821 человек, Эммигрировало 221,319 человек (внешняя миграция). Из вышеизложенного рассчитывалась среднегодовая численность населения, а затем некоторые коэффициенты.

Показатели численности населения. Численность населения – это показатель численности населения в определенное время, который можно использовать для определения абсолютного прироста населения, темпов роста и средней численности населения.

Численность населения \bar{C} , то есть для определения численности населения $\bar{C} = \frac{C_0 + C_1}{2}$ в данном году используются показатели абсолютной численности населения на начало и конец года.

Здесь \bar{C} - среднегодовая численность населения.

$$\bar{C} = (35\,271,3 + 36\,024,9)/2 = 35\,648,1 \text{ минг киши.}$$

Аҳолининг табиий ҳаракати. Аҳолининг табиий ҳаракати – туғилиш ва ўлим жараёнлари билан боғлиқ аҳоли сонининг ўзгаришидир.

Естественный рост: $\Delta e = P - C$

В нем P — число родившихся, C — число смертей.

Рождение и смерть всегда находятся под влиянием различных природных факторов и происходят в определенные периоды по определенным законам.

Общий коэффициент рождаемости:

$$O_{pk} = \frac{P}{\bar{C}} \times 1000 = 932,217 / 35\,648,1 \times 1000 = 26,1 \text{ ‰}$$

Общий коэффициент смертности:

$$O_{ск} = \frac{C}{\bar{C}} \times 1000 = 172,068 / 35\,648,1 \times 1000 = 4,8 \text{ ‰}$$

Общий коэффициент естественного прироста:

$$O_{ек} = \frac{P-C}{\bar{C}} \times 1000 = 760,1 / 35\,648,1 \times 1000 = 21,3 \text{ ‰}$$

Общий рост в 2022 году:

$$\Delta_{op} = C^{m+1} - C^m = 36\,024,9 - 35\,271,3 = 753,6 \text{ тысяча человек,}$$

Естественный рост:

$$\Delta e = P - C = 932,217 - 172,068 = 760,149 \text{ тысяча человек,}$$

Индикатором механического движения является миграция. Миграция – это механическое перемещение людей внутри страны или между странами.

$$\Delta_{tex} = \Delta_{приб} - \Delta_{выб}$$

$\Delta_{приб}$ - иммигранты, $\Delta_{выб}$ - эмигранты.

Миграционный рост:

$$\Delta_{mex} = \Delta_{op} - \Delta_e = 753,6 - 760,149 = -6,549 \text{ тысяча человек.}$$

Соответственно, коэффициенты общего прироста населения и миграционного прироста были следующими:

Общий прирост населения:

$$\Delta_{op} = \Delta_e + \Delta_m$$

Здесь, Δ_e - естественный рост; Δ_m - миграционный рост.

Коэффициент общего роста:

$$\Delta_{орк} = 753,6 / 35\,648,1 \times 1000 = 21,1 \text{ ‰}$$

Коэффициент механического роста:

$$K_{mex} = \frac{\Delta_{mex}}{C} \times 1000$$

$$\Delta_{mexk} = -6,549 / 35\,648,1 \times 1000 = -0,18 \text{ ‰}$$

Результат: в 2022 году естественный прирост населения Узбекистана составит 760,149 тыс. человек, миграционное движение -6,549 тыс. человек, общий прирост 753,6 тыс. человек, общий коэффициент рождаемости 26,1 ‰, общая смертность коэффициент составит 4,8 ‰, общий коэффициент естественного прироста составил 21,3 ‰ и соответственно общий коэффициент прироста составил 21,1 ‰, коэффициент миграционного (механического) прироста (убыли) составил -0,18 ‰.

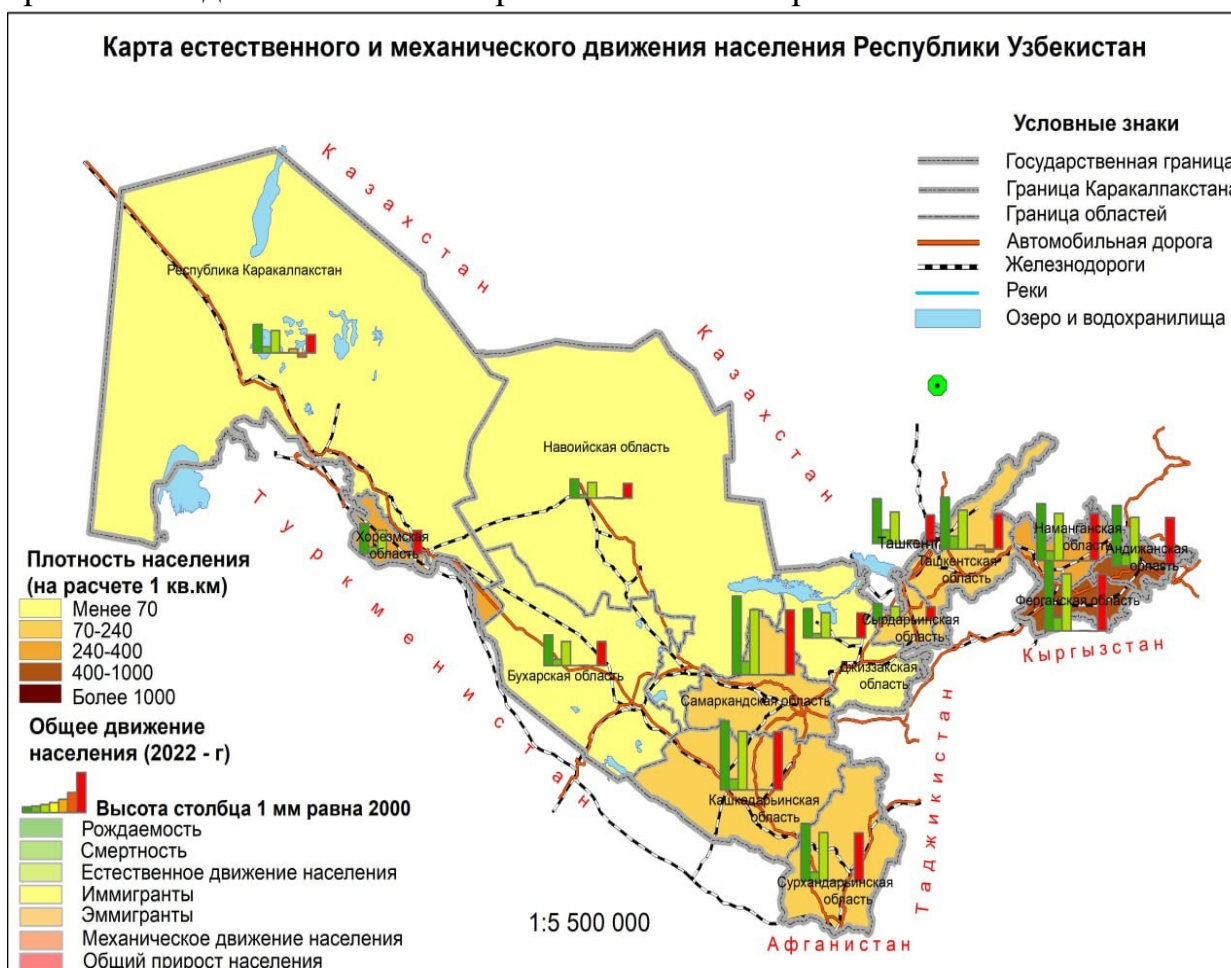
В качестве основных источников для создания карт населения принимаются материалы государственной статистики (текущий учет списков населения), картографические и аэрокосмические материалы.

Распределение населения показано на карте в пределах крупных регионов. Если население каждого региона картографировать и анализировать, миграционные процессы можно будет отразить более четко и на основе полных данных. Потому что он учитывает географические особенности этой территории, взаимоотношения населения и природной среды, социально-экономические условия на карте населения государств.

При картировании механических перемещений населения необходимо различать миграцию к новому месту жительства на постоянное место жительства, миграции, связанные с сезонными работами, а также рекреационные приезды. В крупных городах и урбанизированных регионах необходимо разделять ежедневную или еженедельную миграцию. Передвижение людей из одного места в другое изображается на карте методом символов в движении. Существуют отдельные социально-географические описания, показывающие численность и редкость, состав, время и повторяемость миграционных потоков. Через карты общего

прироста населения и миграции, созданные в программах ГАТ, за какой период население какой страны мигрировало в какую страну с целью работы или учебы, какой процент занятого населения в определенной стране составляют мигранты, связаны денежные потоки миграция, территориальное распределение мигрантов, иностранцы могут представлять такую информацию, как трудовая деятельность, основные туристические районы и туристические центры.

При картографировании населения широко используются динамические (анимированные) картографические знаки и методы картографического представления, возможности ГАТ движущихся знаков, картограммы, картограммы, символы, методы линейной разметки. Желательно, чтобы выбранные графические инструменты были максимально простыми и не занимали много места, и в то же время были четко отличимы друг от друга и легко рисовались, а изменение внутри сравнимого движения было хорошо заметно. 1-карта.



Карта составлена авторами на основе информации Госкомстата Республики Узбекистан.

На основе приведенных выше коэффициентов были разработаны и составлены карты населения в программах ГИС. Для этого использовались методы анимации (в программе ArcGIS).

При картировании перемещений населения целесообразно использовать методы точек со знаками. Но форма геометрического символа в этом методе задана темным цветом и не подлежит закрашиванию внутри. Например, внешняя миграция может быть представлена кружком, а внутренняя миграция — точкой. В некоторых случаях на одной карте могут быть указаны точки двух размеров, например, в большой точке — 1000 человек, а в маленькой — 100 человек. Разумеется, соответствующий подбор «веса» точек дает наглядное представление о распределении предмета или события и явления в границах изображаемой области.

Также необходимо обратить особое внимание на масштаб символов, используемых при составлении карт. Они представляют собой количественные показатели, такие как плотность населения и увеличение или уменьшение числа мигрантов. Например, если один круг соответствует 10 000 мигрантов, а другой — 50 000 мигрантов, то один будет в пять раз больше другого. Он производит очень сильное впечатление при динамическом рендеринге в ГИС, но в бумажной версии может занимать много места и увеличиваться в динамическом режиме. С учетом этого в программе ArcGIS создана миграционная карта нашей республики. На карте отображалось анимированное изображение путем мигания движения условных символов.

Заключение. Любым картам населения и миграции свойственны тематические карты, состоящие из общегеографических элементов карты и специального содержания. Независимо от конкретного содержания, изображенного на картах, и способов картографического изображения, на некоторых из них могут быть изображены более общие географические элементы, а на некоторых — менее.

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Яковлев Н.В.
студент 2 курса магистратуры
«Российский биотехнологический университет»
Россия, г.Москва
Научный руководитель:
Горкуша О.А., кандидат экономических наук
доцент
кафедра «Управление бизнесом и сервисные технологии»
«Российский биотехнологический университет»
Россия, г.Москва

МАРКЕТИНГОВАЯ СТРАТЕГИЯ КАК ИНСТРУМЕНТ ПОВЫШЕНИЯ КОНКУРЕНТОСПОСОБНОСТИ НА РЫНКЕ

Аннотация. Конкуренция является основой развития рыночного хозяйства. Неконкурентоспособные компании теряют позиции на рынке и прекращают свое существование. В современных рыночных условиях компаниям необходимо внедрять маркетинговые стратегии, понимать и предвидеть требования рынка, анализировать поведение потребителей.

Ключевые слова: конкуренция, конкурентоспособность, маркетинговая стратегия.

Yakovlev N.V.
2nd year master's student
"Russian Biotechnological University"
Russia, Moscow
Scientific supervisor: Gorkusha O.A., candidate of economic sciences
associate professor
Department of Business Management and Service Technologies
"Russian Biotechnological University"
Russia, Moscow

MARKETING STRATEGY AS A TOOL FOR INCREASING COMPETITIVENESS IN THE MARKET

Annotation. Competition is the basis for the development of a market economy. Non-competitive companies lose their market positions and ultimately cease to exist. In today's market conditions, companies need to implement marketing strategies, understand and anticipate market demands, and analyze consumer behavior.

Keywords: competition, competitiveness, marketing strategy.

Одно из ключевых свойств рыночной экономики – конкуренция. По мере развития общества, понятия конкуренции и конкурентоспособности претерпевали существенные изменения. Однако на сегодняшний день вопросы конкурентоспособности требуют дальнейшей разработки. По классификации К. Маркса, конкуренция существовала и существует во всех общественно-экономических формациях. В широком смысле, конкурентоспособность, это умение выживать, развиваться и процветать в мире жесткой конкуренции.

Исследования по теории стратегического менеджмента, маркетинга внесли колоссальный вклад в теории конкуренции и конкурентоспособности. Согласно исследованию Коулинга и Мюллера, в теории конкуренции, самой предпочтительной является модель монополии: продавец может повышать цены, снижать количество, качество товара или услуги, получать монопольную прибыль. По мнению Чемберлина, компании, производя или продавая дифференцированные товары, выступают в качестве локальных монополистов, формируют рынок и способны регулировать цены на нем.

Интерес к изучению конкурентоспособности и конкуренции проявляли многие ученые, например, Уолкер, рассматривал маркетинговую стратегию как фундаментальную модель имеющихся плановых заданий, распределения ресурсов и взаимосвязей организации с рынком, конкурентами и другими факторами окружающей бизнес - среды.

Таким образом, конкурентоспособность — это категория, характеризующая способность компании конкурировать на рынке товаров, услуг, показывать результаты и быть заметным игроком.

В современной среде, неопределенности и неоднозначности, акцент в части проведения маркетинговой стратегии, смещается в сторону использования ситуативных решений, соответствующих удовлетворению потребителей. При формировании маркетинговой стратегии компании необходимо учитывать факторы, провоцирующие цепную реакцию в создании или исчезновении монополии. Факторы, которые провоцирующие цепную реакцию на рынке:

- 1) ситуация в отрасли;
- 2) поведение покупателей;
- 3) условия конкуренции.

В результате взаимодействия этих факторов, возникает цепная реакция, которая обеспечивает пространство для новой монополии, чем и должна воспользоваться компания, заложив свое видение ситуации и действий на рынке в формируемую ею маркетинговую стратегию. Факторы, которые формирующие маркетинговую стратегию компании:

- 1) замечать изменения;
- 2) четко формулировать план действий компании на рынке;
- 3) видеть перспективу.

Таким образом, при формировании маркетинговой стратегии компании необходимо понять, какую монополию она может претворить в жизнь на основе анализа ситуации и учета факторов конкурентного преимущества.

По мнению автора, к факторам устойчивого конкурентного преимущества компании можно отнести:

1) Уникальность продукта (привлечение покупателей товаром/услугой, имеющих уникальные качества и свойства);

2) Сила бренда (узнаваемость, что позволяет предлагать продукт по высокой цене);

3) Опыт (эффективность применения знаний и технологических инноваций, позволяющей снижать затраты);

4) Эффект «масштаба» (возможность установления низкой цены за счет большего объема производства/реализации предлагаемого товара);

5) Диверсификация (возможность предложения широкого ассортимента);

6) Снижение издержек (условия компании, при которых затраты являются низкими по сравнению с затратами конкурентов, что позволяет увеличивать объем, повысить прибыль и рентабельность);

7) Качество услуг (удержания клиентов, привлечение новых – за счет сервисов и удобств).

Таким образом, конкурентоспособность – это способность компаний реализовывать конкурентоспособные товары, которые по ценовым характеристикам превосходят товары конкурентов. Конкурентоспособность рассматривается эффективным механизмом, обеспечивающим и создающим компаниям конкурентные преимущества и устойчивую позицию на рынке с учетом оценки возможностей конкурентов. Цель любой компания – выгодно удовлетворять запросы целевых потребителей и поддерживать рост бизнеса для обеспечения устойчивой конкурентоспособности, что требует разработки эффективной маркетинговой стратегии. Соответственно меняется характер маркетинговой деятельности, содержание, которой дополняется новым маркетинговым инструментарием: создание сайта в виде электронной витрины; проведение маркетинга в социальных сетях; осуществление интерактивного диалога с покупателем; кастомизация предложения; таргетированная, контекстная и медийная реклама.

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Ян Лу
студент магистратуры
Московский педагогический государственный университет

СТРАТЕГИИ РИСК МЕНЕДЖМЕНТА В СОВРЕМЕННОЙ ОРГАНИЗАЦИИ

Аннотация. В условиях быстро изменяющегося делового окружения эффективное управление рисками становится ключевым элементом успешного функционирования любой организации. В данной статье рассматриваются основные стратегии риск-менеджмента, такие как избегание, снижение, передача и принятие рисков. Описаны этапы процесса управления рисками, инструменты и методы, а также примеры успешного применения стратегий в различных отраслях.

Ключевые слова: риск-менеджмент, стратегии управления рисками, избегание риска, снижение риска, передача риска, принятие риска, финансовая устойчивость, операционная эффективность.

Yan Lu
graduate student
Moscow Pedagogical State University

RISK MANAGEMENT STRATEGIES IN A MODERN ORGANIZATION

Annotation. In a rapidly changing business environment, effective risk management is a key element of successful organizational performance. This article examines the main risk management strategies, such as risk avoidance, risk reduction, risk transfer, and risk acceptance. The stages of the risk management process, tools and methods, as well as examples of successful strategy implementation in various industries are described.

Key words: risk management, risk management strategies, risk avoidance, risk reduction, risk transfer, risk acceptance, financial stability, operational efficiency.

В условиях быстро изменяющегося делового окружения, глобализации и развития технологий, организации сталкиваются с множеством рисков. Эти риски могут существенно повлиять на устойчивость бизнеса и его способность достигать поставленных целей. Эффективное управление рисками становится ключевым элементом успешного функционирования любой современной организации. В данной статье мы рассмотрим основные стратегии риск-менеджмента, используемые в современных организациях.

Риск-менеджмент — это процесс идентификации, оценки и контроля рисков с целью минимизации их негативного воздействия на организацию. Риски можно классифицировать по разным признакам, включая:



Рисунок 1. Классификация рисков

Процесс риск-менеджмента играет ключевую роль в устойчивом развитии и минимизации возможных потерь для современных организаций. Этот процесс состоит из нескольких важных этапов, каждый из которых требует тщательного анализа и принятия стратегических решений. Первым этапом является идентификация рисков. На этом этапе организация определяет потенциальные риски, которые могут повлиять на её деятельность. Используются различные методы, такие как мозговые штурмы, экспертные опросы и анализ прошлых инцидентов, а также инструменты, такие как SWOT-анализ и PESTLE-анализ. Важно учитывать как внутренние, так и внешние факторы, которые могут представлять угрозу. Цель этого этапа - создать исчерпывающий список возможных рисков для последующего анализа. Следующим этапом является оценка рисков. После выявления всех возможных рисков организация должна оценить их вероятности и возможные последствия. Это включает количественные и качественные методы анализа. Оценка рисков помогает определить, какие из них являются наиболее значимыми и требуют немедленного внимания. Организация оценивает, насколько каждый риск может повлиять на её цели и задачи, что позволяет ранжировать риски по степени важности. На основании результатов оценки разрабатываются стратегии управления рисками. Организация определяет методы и подходы к минимизации или устранению выявленных рисков. Это может включать разработку планов действий, которые помогут избежать или уменьшить воздействие рисков. Важным аспектом является выбор наиболее

подходящей стратегии для каждого конкретного риска, что может включать изменение операционных процессов, внедрение новых технологий или проведение обучающих программ для сотрудников. После разработки стратегий следует этап их реализации. Организация начинает внедрение выбранных методов управления рисками. Этот процесс может включать изменение операционных процедур, внедрение новых технологий, проведение тренингов и других мероприятий, направленных на снижение уровня рисков. Важно, чтобы все сотрудники были осведомлены о новых процедурах и следовали им. Заключительный этап процесса риск-менеджмента - мониторинг и пересмотр. Организация должна постоянно наблюдать за рисками и оценивать эффективность применяемых стратегий. Это включает регулярный пересмотр и обновление планов управления рисками, а также внесение корректировок при необходимости. Постоянный мониторинг позволяет своевременно выявлять новые риски и реагировать на изменения в бизнес-среде.

Современные организации используют различные стратегии управления рисками, которые можно разделить на несколько основных категорий. Одна из стратегий - избегание риска. Эта стратегия заключается в отказе от деятельности или действий, которые могут привести к возникновению риска. Она эффективна в ситуациях, когда риск имеет крайне негативные последствия и не может быть приемлемым для организации. Например, компания может отказаться от выхода на новый рынок, если политическая или экономическая нестабильность в этом регионе представляет значительный риск. Снижение риска включает меры по уменьшению вероятности наступления риска или его воздействия. Эта стратегия может быть реализована через внедрение внутренних контролей и процедур, использование современных технологий и проведение обучения и развития персонала. Внедрение внутренних контролей и процедур направлено на уменьшение операционных рисков, современные технологии помогают минимизировать риски, связанные с кибербезопасностью и данными, а обучение сотрудников способствует повышению их компетентности и снижению риска человеческих ошибок. Таким образом, процесс риск-менеджмента и стратегии управления рисками являются важными инструментами для обеспечения стабильности и устойчивого развития организаций. Эффективное управление рисками помогает организациям не только минимизировать потери, но и использовать возможности для роста и развития в условиях неопределенности.

Процесс риск-менеджмента играет ключевую роль в устойчивом развитии и минимизации возможных потерь для современных организаций. Этот процесс включает несколько важных этапов, каждый из которых требует тщательного анализа и принятия стратегических решений. Первым этапом является идентификация рисков. На этом этапе организация

определяет потенциальные риски, которые могут повлиять на её деятельность. Используются методы, такие как мозговые штурмы, экспертные опросы и анализ прошлых инцидентов, а также инструменты, такие как SWOT-анализ и PESTLE-анализ. Важно учитывать как внутренние, так и внешние факторы, которые могут представлять угрозу. Цель этого этапа - создать исчерпывающий список возможных рисков для последующего анализа. Следующим этапом является оценка рисков. После выявления всех возможных рисков организация должна оценить их вероятности и возможные последствия. Это включает количественные и качественные методы анализа. Оценка рисков помогает определить, какие из них являются наиболее значимыми и требуют немедленного внимания. Организация оценивает, насколько каждый риск может повлиять на её цели и задачи, что позволяет ранжировать риски по степени важности. На основании результатов оценки разрабатываются стратегии управления рисками. Организация определяет методы и подходы к минимизации или устранению выявленных рисков. Это может включать разработку планов действий, которые помогут избежать или уменьшить воздействие рисков. Важным аспектом является выбор наиболее подходящей стратегии для каждого конкретного риска, что может включать изменение операционных процессов, внедрение новых технологий или проведение обучающих программ для сотрудников. После разработки стратегий следует этап их реализации. Организация начинает внедрение выбранных методов управления рисками. Этот процесс может включать изменение операционных процедур, внедрение новых технологий, проведение тренингов и других мероприятий, направленных на снижение уровня рисков. Важно, чтобы все сотрудники были осведомлены о новых процедурах и следовали им. Заключительный этап процесса риск-менеджмента - мониторинг и пересмотр. Организация должна постоянно наблюдать за рисками и оценивать эффективность применяемых стратегий. Это включает регулярный пересмотр и обновление планов управления рисками, а также внесение корректировок при необходимости. Постоянный мониторинг позволяет своевременно выявлять новые риски и реагировать на изменения в бизнес-среде.

Эффективное управление рисками является ключевым элементом успешного функционирования современной организации. Использование стратегий избегания, снижения, передачи и принятия рисков позволяет минимизировать их негативное воздействие и обеспечить устойчивое развитие бизнеса. Важно помнить, что риск-менеджмент — это непрерывный процесс, требующий постоянного мониторинга и адаптации к изменяющимся условиям. Современные инструменты и методы управления рисками, а также успешный опыт ведущих организаций могут служить хорошими примерами для разработки и реализации собственных стратегий риск-менеджмента.

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Ян Лу
студент магистратуры
Московский педагогический государственный университет

ЭКСПОРТНО-ИМПОРТНАЯ ДЕЯТЕЛЬНОСТЬ ОРГАНИЗАЦИИ КАК ОБЪЕКТ РИСК-МЕНЕДЖМЕНТА

Аннотация. Экспортно-импортная деятельность предоставляет организациям значительные возможности для роста и развития, но также связана с множеством рисков. В статье рассматриваются основные риски, связанные с внешнеэкономической деятельностью, такие как политические, экономические, логистические и культурные риски. Описаны стратегии управления этими рисками и примеры успешного применения стратегий риск-менеджмента в различных отраслях.

Ключевые слова: экспортно-импортная деятельность, внешнеэкономическая деятельность, политические риски, экономические риски, логистические риски, культурные риски, стратегии управления рисками.

Yan Lu
graduate student
Moscow Pedagogical State University

EXPORT-IMPORT ACTIVITIES OF AN ORGANIZATION AS AN OBJECT OF RISK MANAGEMENT

Annotation. Export-import activities provide organizations with significant growth and development opportunities but are also associated with numerous risks. The article examines the main risks associated with foreign economic activity, such as political, economic, logistical, and cultural risks. It describes risk management strategies and examples of successful risk management strategy implementation in various industries.

Key words: export-import activities, foreign economic activity, political risks, economic risks, logistical risks, cultural risks, risk management strategies.

В условиях глобализации и интеграции мировых рынков экспортно-импортная деятельность становится важной составляющей бизнеса многих организаций. Эта деятельность предоставляет компании возможности для расширения рынков сбыта, оптимизации производственных процессов и диверсификации поставок. Однако с расширением международной торговли возрастают и риски, связанные с внешнеэкономической деятельностью. В данной статье мы рассмотрим основные риски, связанные

с экспортно-импортной деятельностью, и стратегии риск-менеджмента, направленные на минимизацию их влияния.

Экспортно-импортная деятельность подвержена множеству рисков, которые могут существенно повлиять на успех международных торговых операций. Эти риски можно классифицировать по различным категориям, каждая из которых вносит свой вклад в сложность и неопределенность внешнеэкономической деятельности.

Одним из наиболее значимых факторов являются политические и правовые риски. Политическая нестабильность в странах-партнерах может привести к серьезным проблемам, таким как изменения в политическом режиме, гражданские беспорядки или революции. Эти события способны нарушить торговые связи, привести к задержкам или даже полной остановке поставок. Регуляторные изменения, такие как изменения в таможенных тарифах, налогах, квотах и других аспектах регулирования, также могут существенно повлиять на стоимость и время выполнения экспортно-импортных операций. Введение санкций или эмбарго против определенных стран может полностью прекратить торговлю с ними, что приведет к значительным финансовым потерям для компаний, работающих на международных рынках.

Экономические риски также играют важную роль в экспортно-импортной деятельности. Колебания валютных курсов могут существенно изменить стоимость товаров и услуг, что влияет на прибыльность сделок. Например, значительное снижение курса национальной валюты партнера может сделать экспортируемые товары слишком дорогими, что снижает конкурентоспособность на международном рынке. Высокая инфляция в странах-партнерах может привести к увеличению стоимости товаров и услуг, что также влияет на маржу и конечные цены для потребителей. Кредитные риски, связанные с неплатежеспособностью контрагентов, включают задержки в оплатах и даже банкротства, что может поставить под угрозу финансовую устойчивость компаний, занимающихся внешнеэкономической деятельностью.

Логистические риски представляют собой еще одну важную категорию рисков в экспортно-импортной деятельности. Перебои в цепочке поставок могут быть вызваны различными факторами, включая задержки в поставках, потери или повреждения товаров в процессе транспортировки. Эти проблемы могут возникнуть из-за различных причин, таких как недостатки в инфраструктуре, плохие погодные условия или административные барьеры. Транспортные риски, такие как аварии, природные катастрофы или пиратство, также могут существенно повлиять на безопасность и сохранность грузов. Эти риски могут привести к значительным финансовым потерям и нарушениям в бизнес-процессах.

Культурные и социальные риски часто недооцениваются, но они играют важную роль в успешной международной торговле. Различия в

деловой культуре могут привести к недоразумениям и конфликтам, которые могут замедлить или даже сорвать сделки. Например, различия в подходах к ведению переговоров, стиле общения и деловым обычаям могут создать серьезные препятствия для сотрудничества. Социальные изменения, такие как изменения в социально-экономической обстановке в странах-партнерах, могут влиять на спрос и предложение на рынке. Это может включать изменения в потребительских предпочтениях, уровень доходов и другие социальные факторы, которые могут изменить динамику рынка. Стратегии риск-менеджмента в экспортно-импортной деятельности

Экспортно-импортная деятельность предоставляет организациям значительные возможности для роста и развития, но также связана с множеством рисков. Эффективное управление этими рисками является ключевым элементом успешной внешнеэкономической деятельности. Использование стратегий избегания, снижения, передачи и принятия рисков, а также современных инструментов и методов риск-менеджмента позволяет минимизировать негативное воздействие рисков и обеспечить устойчивое развитие бизнеса. Современные организации должны постоянно мониторить и адаптироваться к изменяющимся условиям внешнеэкономической среды для достижения своих целей.

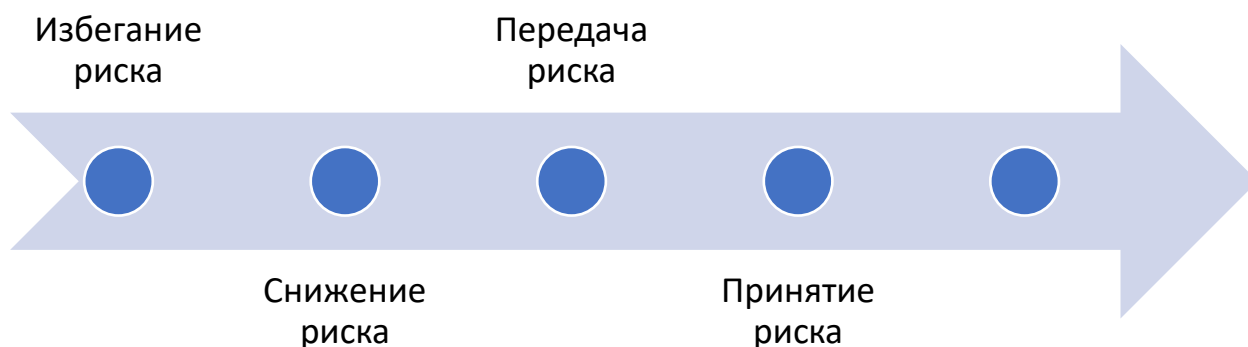


Рисунок 1. Стратегии работы с рисками в экспортно-импортной организации

Для реализации вышеперечисленных стратегий современные организации используют различные инструменты и методы риск-менеджмента. Регулярный анализ политической и экономической ситуации в странах-партнерах помогает своевременно выявлять потенциальные угрозы и принимать обоснованные решения. SWOT-анализ позволяет

оценить сильные и слабые стороны организации, а также возможности и угрозы внешней среды в контексте международной торговли. Анализ сценариев помогает моделировать различные варианты развития событий и оценивать потенциальные риски. Регулярный контроль и аудит экспортно-импортной деятельности обеспечивают выявление и оценку рисков, что позволяет своевременно корректировать стратегии и принимать необходимые меры для их минимизации. Рассмотрим несколько примеров успешного применения стратегий риск-менеджмента в экспортно-импортной деятельности. Автомобильная промышленность часто сталкивается с рисками, связанными с глобальными цепочками поставок. Например, японские автопроизводители успешно применяют стратегии диверсификации поставщиков и рынков сбыта, а также внедрение систем управления запасами, чтобы минимизировать риски перебоев в поставках. Это позволяет им поддерживать стабильность производства и своевременную доставку автомобилей клиентам. Технологические компании, такие как Apple, активно используют хеджирование валютных рисков и заключение страховых договоров для защиты своих операций. Они также инвестируют в анализ и мониторинг политической и экономической ситуации в странах-партнерах, что позволяет им своевременно реагировать на изменения и минимизировать потенциальные угрозы для бизнеса. В результате таких мер компании могут поддерживать свою конкурентоспособность и стабильность на международных рынках. Продовольственные компании, занимающиеся экспортом и импортом продуктов питания, широко применяют стратегии страхования и использования услуг логистических операторов для минимизации рисков, связанных с транспортировкой и сохранностью товаров. Эти меры позволяют обеспечить безопасность продуктов на всех этапах транспортировки, что особенно важно для скоропортящихся товаров. Кроме того, страхование покрывает возможные убытки от повреждений или потерь, что способствует финансовой стабильности компаний.

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Ян Лу
студент магистратуры
Московский педагогический государственный университет

ВЛИЯНИЕ СИСТЕМЫ РИСК-МЕНЕДЖМЕНТА НА ФИНАНСОВО-ЭКОНОМИЧЕСКИЕ ПОКАЗАТЕЛИ СОВРЕМЕННОЙ ОРГАНИЗАЦИИ

Аннотация. Эффективная система риск-менеджмента оказывает значительное влияние на финансово-экономические показатели организации. В статье рассматриваются ключевые аспекты этого влияния, включая повышение финансовой устойчивости, снижение затрат, улучшение кредитного рейтинга, повышение операционной эффективности и увеличение стоимости компании. Приведены примеры успешного применения систем риск-менеджмента в различных отраслях.

Ключевые слова: система риск-менеджмента, финансово-экономические показатели, финансовая устойчивость, снижение затрат, кредитный рейтинг, операционная эффективность, стоимость компании.

Yan Lu
graduate student
Moscow Pedagogical State University

INFLUENCE OF THE RISK MANAGEMENT SYSTEM ON THE FINANCIAL AND ECONOMIC INDICATORS OF A MODERN ORGANIZATION

Annotation. An effective risk management system has a significant impact on the financial and economic performance of an organization. The article examines key aspects of this impact, including increased financial stability, cost reduction, improved credit rating, enhanced operational efficiency, and increased company value. Examples of successful risk management system implementation in various industries are provided.

Key words: risk management system, financial and economic performance, financial stability, cost reduction, credit rating, operational efficiency, company value.

В условиях современного бизнеса, характеризующегося высокой степенью неопределенности и динамичности, эффективность управления рисками играет ключевую роль в обеспечении стабильности и роста компаний. Система риск-менеджмента не только помогает организациям идентифицировать и минимизировать потенциальные угрозы, но и оказывает значительное влияние на их финансово-экономические

показатели. В данной статье мы рассмотрим основные аспекты влияния системы риск-менеджмента на финансовые и экономические показатели организации, а также приведем примеры успешного применения риск-менеджмента в различных отраслях.

Прежде чем рассмотреть влияние системы риск-менеджмента на финансово-экономические показатели, необходимо понять основные компоненты данной системы:



Рисунок 1. Компоненты риск-менеджмента

Эффективная система риск-менеджмента способствует повышению финансовой устойчивости организации. Это достигается за счет своевременного выявления и минимизации финансовых рисков, таких как кредитные риски, валютные колебания и ликвидные риски. В результате, компания становится более способной противостоять финансовым потрясениям и сохранять стабильность своих денежных потоков и резервов.

Система риск-менеджмента позволяет организациям более эффективно управлять своими ресурсами. За счет предотвращения или минимизации потенциальных рисков снижаются затраты, связанные с устранением последствий этих рисков. Например, своевременное выявление и устранение производственных рисков может предотвратить дорогостоящие простои и ремонты оборудования.

Компании с эффективной системой риск-менеджмента часто получают более высокие кредитные рейтинги. Это связано с тем, что кредиторы и инвесторы рассматривают такие компании как более надежные и устойчивые к внешним и внутренним угрозам. В результате, организация

может получать доступ к более выгодным условиям финансирования, что положительно сказывается на ее финансовых показателях.

Система риск-менеджмента способствует улучшению операционной эффективности организации. За счет регулярного мониторинга и оценки операционных рисков компания может своевременно выявлять и устранять узкие места в своих процессах, что приводит к повышению производительности и снижению затрат.

Наличие эффективной системы риск-менеджмента способствует увеличению стоимости компании. Инвесторы и акционеры оценивают наличие такой системы как признак зрелости и ответственности управления, что повышает доверие к компании и ее привлекательность для инвестиций. В результате, рыночная стоимость акций компании может значительно вырасти.

Банки и финансовые учреждения широко используют системы риск-менеджмента для обеспечения своей устойчивости. Например, после глобального финансового кризиса 2008 года многие банки пересмотрели свои подходы к управлению кредитными рисками. Внедрение более строгих стандартов оценки кредитоспособности заемщиков и систем раннего предупреждения о возможных дефолтах позволило существенно снизить уровень неплатежеспособности и повысить финансовую устойчивость.

Производственные компании, такие как автомобильные концерны, активно применяют системы риск-менеджмента для управления рисками в цепочках поставок. Внедрение автоматизированных систем мониторинга и аналитики позволяет своевременно выявлять потенциальные сбои и принимать меры по их устранению. Это способствует снижению затрат на простой и ремонты, а также повышению операционной эффективности.

Технологические компании, такие как Apple и Google, используют системы риск-менеджмента для защиты своих данных и информационных систем от киберугроз. Внедрение передовых технологий кибербезопасности и регулярное тестирование на проникновение позволяют минимизировать риски утечек данных и взломов, что способствует сохранению доверия клиентов и партнеров, а также снижению потенциальных финансовых потерь.

Для оценки влияния системы риск-менеджмента на финансово-экономические показатели организации используются различные методы и инструменты:

- Финансовый анализ: сравнение финансовых показателей компании до и после внедрения системы риск-менеджмента, включая анализ денежных потоков, прибыли, затрат и рентабельности.
- Анализ показателей кредитного рейтинга: оценка изменений в кредитном рейтинге компании после внедрения системы риск-менеджмента.

- Оценка стоимости компании: анализ динамики рыночной стоимости акций и капитала компании.

- Операционный анализ: сравнение показателей операционной эффективности, таких как производительность труда, издержки на производство и уровень дефектов.

Эффективная система риск-менеджмента оказывает значительное влияние на финансово-экономические показатели современной организации. Она способствует повышению финансовой устойчивости, снижению затрат, улучшению кредитного рейтинга, повышению операционной эффективности и увеличению стоимости компании. Современные организации должны активно внедрять и развивать системы риск-менеджмента, чтобы успешно противостоять вызовам и угрозам, с которыми они сталкиваются в условиях глобальной экономики. Важно помнить, что риск-менеджмент — это непрерывный процесс, требующий постоянного мониторинга и адаптации к изменяющимся условиям, что позволяет организациям сохранять конкурентоспособность и устойчивое развитие.

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Ян Лу
студент магистратуры
Московский педагогический государственный университет

СОВЕРШЕНСТВОВАНИЕ РИСК-МЕНЕДЖМЕНТА ОРГАНИЗАЦИИ

Аннотация. Совершенствование системы риск-менеджмента является ключевым фактором успешного функционирования современной организации. В статье рассматриваются основные аспекты совершенствования риск-менеджмента, такие как идентификация и оценка рисков, разработка и внедрение стратегий управления, мониторинг и контроль, обучение и развитие персонала, а также внедрение новых технологий. Приведены примеры успешного применения данных подходов в различных отраслях.

Ключевые слова: совершенствование риск-менеджмента, идентификация рисков, оценка рисков, стратегии управления рисками, мониторинг, контроль, обучение, новые технологии.

Yan Lu
graduate student
Moscow Pedagogical State University

IMPROVING THE ORGANIZATION'S RISK MANAGEMENT

Annotation. Improving the risk management system is a key factor for the successful operation of a modern organization. The article examines the main aspects of risk management improvement, such as risk identification and assessment, development and implementation of management strategies, monitoring and control, training and development of personnel, and the implementation of new technologies. Examples of successful application of these approaches in various industries are provided.

Key words: risk management improvement, risk identification, risk assessment, risk management strategies, monitoring, control, training, new technologies.

Современные организации сталкиваются с множеством вызовов и неопределенностей, что делает эффективное управление рисками критически важным для их успеха и устойчивого развития. Совершенствование системы риск-менеджмента позволяет организациям не только минимизировать негативные воздействия рисков, но и использовать их в качестве возможностей для роста и инноваций. В данной статье мы рассмотрим ключевые аспекты и подходы к совершенствованию риск-

менеджмента в организациях, включая внедрение новых технологий, развитие корпоративной культуры и улучшение процессов управления рисками.

Совершенствование риск-менеджмента включает комплексный подход, охватывающий несколько ключевых аспектов:

Идентификация и оценка рисков:	• улучшение методов и инструментов для более точного выявления и оценки рисков.
Разработка и внедрение стратегий управления рисками:	• разработка более эффективных и адаптивных стратегий для минимизации негативных последствий рисков.
Мониторинг и контроль:	• внедрение систем мониторинга для постоянного отслеживания и контроля рисков.
Обучение и развитие персонала:	• повышение компетентности сотрудников в области риск-менеджмента.
Внедрение новых технологий:	• использование современных технологий для автоматизации и оптимизации процессов управления рисками.

Рисунок 1. Совершенствование риск-менеджмента

Совершенствование процессов идентификации и оценки рисков требует использования передовых методов и инструментов, таких как:

- SWOT-анализ: позволяет выявить сильные и слабые стороны организации, а также возможности и угрозы внешней среды.
- Анализ сценариев: моделирование различных сценариев развития событий для оценки потенциальных рисков.
- Метод Монте-Карло: использование статистических методов и моделирования для оценки вероятности наступления рисков и их последствий.
- Анализ причинно-следственных связей (Root Cause Analysis): выявление коренных причин рисков для разработки эффективных мер их предотвращения.

Многие компании успешно применяют современные методы и инструменты для идентификации и оценки рисков. Например, нефтегазовые компании используют анализ сценариев для оценки рисков, связанных с колебаниями цен на нефть и природными катастрофами. Финансовые учреждения активно применяют метод Монте-Карло для моделирования кредитных рисков и оценки вероятности дефолтов.

Для эффективного управления рисками организациям необходимо разработать и внедрить адаптивные стратегии, включающие:

- Избегание риска: отказ от операций или проектов с неприемлемым уровнем риска.

- Снижение риска: меры по уменьшению вероятности наступления или воздействия риска, такие как улучшение внутренних процессов и внедрение стандартов безопасности.

- Передача риска: перекладывание рисков на третьи стороны через страхование или аутсорсинг.

- Принятие риска: осознанное принятие рисков, которые являются приемлемыми для организации.

Автомобильные компании, такие как Toyota, активно применяют стратегию снижения рисков через внедрение системы "Just-in-Time" для оптимизации производства и минимизации складских запасов. Страховые компании широко используют стратегию передачи рисков, предлагая своим клиентам различные страховые продукты для защиты от финансовых потерь.

Эффективное совершенствование риск-менеджмента требует внедрения систем мониторинга, позволяющих своевременно отслеживать и оценивать риски. Такие системы могут включать:

- Информационные панели (dashboards): визуализация ключевых показателей и данных о рисках для быстрого принятия решений.

- Системы раннего предупреждения: автоматизированные системы, которые сигнализируют о возможных рисках на ранних стадиях.

- Регулярные аудиты и проверки: проведение регулярных внутренних и внешних аудитов для оценки эффективности управления рисками.

Финансовые учреждения, такие как банки, активно внедряют системы мониторинга и раннего предупреждения для отслеживания кредитных и операционных рисков. Производственные компании используют информационные панели для контроля качества продукции и снижения производственных рисков.

Обучение и развитие персонала являются ключевыми элементами совершенствования системы риск-менеджмента. Это включает:

- Регулярные тренинги и семинары: проведение обучения для повышения осведомленности сотрудников о рисках и методах их управления.

- Сертификационные программы: получение международных сертификатов в области риск-менеджмента, таких как ISO 31000 и COSO.

- Развитие корпоративной культуры: создание культуры, ориентированной на управление рисками, где каждый сотрудник осознает свою роль в этом процессе.

Компании, такие как General Electric, внедрили программы обучения и сертификации для своих сотрудников в области риск-менеджмента, что позволило значительно повысить уровень осведомленности и компетентности персонала. Финансовые учреждения, такие как HSBC,

активно развивают корпоративную культуру управления рисками через регулярные тренинги и коммуникационные кампании.

Совершенствование риск-менеджмента невозможно без использования современных технологий. Это включает:

- Big Data и аналитика данных: использование больших данных для анализа и прогнозирования рисков.

- Искусственный интеллект (AI) и машинное обучение: применение AI и машинного обучения для автоматизации процессов идентификации и оценки рисков.

- Кибербезопасность: внедрение передовых технологий защиты данных и информационных систем от киберугроз.

Технологические компании, такие как Google и Microsoft, активно используют AI и аналитические инструменты для управления киберрисками и защитой данных. Финансовые учреждения, такие как JP Morgan, внедряют технологии Big Data для прогнозирования кредитных рисков и улучшения качества обслуживания клиентов.

Совершенствование системы риск-менеджмента является ключевым фактором успешного функционирования современной организации. Использование передовых методов и инструментов идентификации и оценки рисков, разработка и внедрение адаптивных стратегий управления, эффективные системы мониторинга и контроля, обучение и развитие персонала, а также внедрение новых технологий позволяют организациям минимизировать негативные последствия рисков и использовать их в качестве возможностей для роста и инноваций. Постоянное совершенствование риск-менеджмента способствует повышению устойчивости и конкурентоспособности организации в условиях быстро меняющегося делового окружения.

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*Янгибоев Б.Я., доктор экономических наук
профессор
Университет экономики и педагогики
Узбекистан
Холмирзаев Т.Р.
стажер-преподаватель
Университет экономики и педагогики
Узбекистан*

НЕКОТОРЫЕ ПРОБЛЕМЫ СОВЕРШЕНСТВОВАНИЯ СЕРВИСНОГО ОБСЛУЖИВАНИЯ В УСЛОВИЯХ ЦИФРОВОЙ ЭКОНОМИКЕ

Аннотация. В статье делается попытка анализировать состояние всех отраслей национальной экономики, в том числе сферы оказания услуг в условиях цифровой экономики и рассмотрены вопросы совершенствования субъектов сферы оказания услуг и даны некоторые предложения по их совершенствованию.

Ключевые слова: цифровая экономика, информационные технологии, сферы оказания услуг, платное оказание услуг, бытовые услуги, субъекты сферы оказания услуг.

*Yangiboev B., doctor of economic sciences
professor
University of Economics and Pedagogy
Uzbekistan
Kholmiraev T.
trainee teacher
University of Economics and Pedagogy
Uzbekistan*

SOME PROBLEMS OF IMPROVING SERVICE IN THE DIGITAL ECONOMY

Annotation. The article makes an attempt to analyze the state of all sectors of the national economy, including the sphere of providing services in the digital economy, and considers the issues of improving the subjects of the sphere of providing services and gives some suggestions for their improvement.

Keywords: digital economy, information technology, service delivery, paid services, consumer services, service providers.

Введение и постановка цели. Одной из важных стратегических задач является реализация новых структурных изменений в сфере услуг в

условиях углубления реализуемых в Республике Узбекистан экономических реформ. Основная цель этого – создание цифрового мира сервисной структуры, обеспечивающего экономический рост и повышение благосостояния населения.

«Цифровой» мир, рождение «Цифровой экономики» тесно связано с новым развитием. Невозможно обсуждать эти две темы по отдельности. Аналогично внешняя среда деятельности коммунальных служб делится на макро- и микросреду.

Макросреда включает в себя прямые факторы, влияющие на общее состояние развития предпринимательства, в частности, темпы развития социальной ситуации, уровень инфляции и безработицы, изменение условий и т. д. Цифровизация государственных услуг может еще больше повысить уровень безработицы.

Востребованность сферы услуг микросреды и цифровизация прямых отношений с потребителями, естественно, такая ситуация требует фундаментального структурного пересмотра в сфере предоставления коммунальных услуг, перехода к новым моделям социального развития.

Гибкость предоставления государственных услуг - это их реакция на влияние внутренних и внешних факторов, а организационная структура и методы управления предполагают цифровизацию. В таких условиях руководство компании имеет возможность эффективно реагировать на изменения внешней и внутренней среды с экономической точки зрения. Для этого важно разработать алгоритм управления процессом цифровой адаптации.

Стоит отметить, что чем сложнее ситуация, тем быстрее требуется решение различных задач, тем важнее становится целенаправленность действий и способность заранее реагировать на существующие изменения. Кроме того, успех коммунальных подрайонов в современный период требует глубокого и всестороннего анализа факторов их внутренней и внешней среды.

Данный анализ проводится на основе взглядов на уровень риска, изменения состояния рынков, анализа деятельности отрасли. Это, в свою очередь, дает возможность малому бизнесу быстро адаптироваться к внешней среде или изменению потребительского спроса.

Особое внимание следует обратить на то, что отрасль обслуживания имеет классификацию внешней среды. В такой ситуации необходимо быстро адаптироваться к новым требованиям внешней среды на основе предвидения изменений образа клиента и выявления новых ситуаций. Также каждый подрайон должен разработать собственную стратегию развития. Неотъемлемой частью разработки этой стратегии является определение типа услуги.

В данной статье рассматриваются некоторые аспекты развития сервисного обслуживания в условиях цифровой экономики в Узбекистане,

тенденции развития, их изменения и совершенствования в соответствии с жизнью, а также существующие проблемы и решения этих вопросов.

Методология исследования. На основе изучения изменений, происходящих в сфере цифровой экономики в развитых странах мира, в том числе в Республике Узбекистане, сделаны выводы о необходимости их дальнейшего развития в будущем. На основе связи между теорией и практикой использовались такие методы, как анализ и сравнение.

Результаты исследования. Переход к цифровой экономике - вопрос актуальный для всех стран и, конечно же, бизнеса. Так почему же? Что такое цифровая экономика и как она влияет на предоставление услуг?

В научной литературе и печати существует множество определений цифровой экономики, в том числе взаимодействие цифровых информационных технологий и экономических агентов в цифровой экономике в зарубежных источниках, другие описывают ее в терминах хозяйствующих субъектов, подключенных к сети интернет. В результате экономического развития некоторые определяют цифровые технологии и деятельность по созданию, распространению и использованию соответствующих продуктов и услуг.

Действительно, такие определения цифровой экономики точно отражают ее сущность, поскольку, возможно, целесообразно рассматривать цифровую экономику как процесс развития, связанный с технологиями и экономическими агентами или Интернетом, но этого недостаточно, поскольку цифровая экономика в первую очередь служит развитию цифровых информационных технологий и развитие социально-экономических сфер всех стран.

Поэтому правильнее было бы охарактеризовать цифровую экономику как экономическое и социальное развитие в результате внедрения и эффективного использования современных информационных технологий во всех отраслях национальной экономики и различных сферах общественной жизни каждой страны.

Цифровая экономика не ограничивается сферами электронной коммерции, производства товаров и услуг, связанных с информационными технологиями, но и оказанием услуг, здравоохранением, наукой и образованием, строительством, энергетикой, сельским и водным хозяйством, транспортом, геологией, кадастр, архивы, интернет-банкинг, социальная и правоохранительная сферы, и каждая из них отличается высокой эффективностью.

Первым фундаментом цифровой экономики являются информационные технологии. Правильнее было бы назвать это цифровыми информационными технологиями, потому что информационные технологии основаны на соответствующих цифрах. Их эволюция делится на несколько этапов и имеет свои особенности. Очевидно, что появление и

развитие цифровых информационных технологий - это объективный процесс, обусловленный запросами общества.

На сегодняшний день основной целью продвижения цифровых информационных технологий является создание системы информационных технологий на уровне, позволяющем решать любые стратегические задачи, принимать решения по оптимальному управлению социально-экономическими процессами. Это окажет влияние на развитие цифровой экономики.

Следует отметить, что появление персональных компьютеров стало важным шагом в развитии цифровых информационных технологий.

Создание и использование новых систем информационных технологий - это возможность удовлетворить существующие потребности. При этом все пользователи принимают активное участие в продвижении цифровых информационных технологий.

Цифровая экономика затрагивает все отрасли народного хозяйства, и ее влияние напрямую связано со сферой услуг. Развитие сферы услуг, безусловно, будет возрастать вместе со спросом народного хозяйства и населения, но важную роль в этих процессах будет играть и предложение товаров и услуг. В связи с этим в Стратегии действий по развитию Республики Узбекистан указано «Ускоренное развитие сферы услуг, увеличить роль и долю услуг в формировании ВВП, структуру предоставляемых услуг, радикальное преобразование их за счет современных высокотехнологичных видов» - важное направление.

Размер сектора услуг является ключевым фактором повышения или снижения производительности. Состояние национальной экономики, особенно малого и среднего бизнеса, играет ключевую роль в повышении экономической мощи страны и уровня жизни населения. Это, в свою очередь, окажет существенное влияние на развитие сферы услуг, обеспечит занятость и повысит желание работать.

По материалам управления статистики Кашкадарьинской области Республике Узбекистан анализ деятельности поставщиков услуг выявил, что существуют существенные различия между объемом услуг на душу населения по районам области. Эти цифры значительно выше в Карши и Шахрисабзе.

Основной причиной этого является миграция рабочей силы из других районов области, а также добавление рабочих мест, которые могут быть заняты в местных производствах и услугах в этих городах, даже если место жительства находится в других районах. возможностей трудоустройства мигрантов.

Так как большая часть полезных ископаемых страны, таких как газ и нефть, приходится на регион, вклад региона в республиканский бюджет значителен, так как на него приходится 97% газовой ренты и занято в

газовой отрасли, подоходный налог, уплаченный получателями, будет перечисляться в государственный бюджет.

Тот факт, что часть налогов, которые должны были быть уплачены в республиканский бюджет, остается в регионе, позволяет улучшить количество и качество услуг. Есть возможность направить эти ресурсы на реализацию специальных программ в беднейших районах области, оказание дополнительных услуг и улучшение занятости.

При анализе показателей сферы услуг области в 2018-2020 гг. уровень оказания бытовых и платных услуг населению области увеличился, но, как отмечалось выше, по районам установлено, что различия между.

Объем бытовых услуг на душу населения в области в 2018 году составил в среднем 96 429 сумов, в 2020 году - 119 645 сумов, увеличившись за 2020 год в 1,2 раза по сравнению с 2018 годом. Уровень платных услуг на душу населения в области в среднем составил 837,4 тыс. сум в 2018 году и 1233,1 тыс. сум в 2020 году, увеличившись в 2020 году в 1,5 раза по сравнению с 2018 годом.

В заключение следует отметить, что количество субъектов, оказывающих бытовые и платные услуги населению Кашкадарьинской области, в том числе организации торговли, общественного питания, транспорта, электро-, газо- и водоснабжения, из года в год растет. Многие из них тесно связаны с инновациями цифровой экономики, например, установка «умных» счетчиков, точно измеряющих потребление газа, воды и электроэнергии, удобных для бизнеса и населения, является доказательством наших мнений.

В результате повышения как количества, так и качества услуг, а также стремительного внедрения модернизационных процессов на основе цифровых технологий закладывается основа для высокого уровня благосостояния населения.

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Ярматова М.А.
старший преподаватель
кафедра Узбекского языка и литературы
Каршинский инженерно-экономический институт

ОСОБЕННОСТИ ИСПОЛЬЗОВАНИЯ ВИДЕОМАТЕРИАЛОВ НА УРОКАХ РУССКОГО ЯЗЫКА

Аннотация. Данная статья рассматривает важность и эффективность применения видеоматериалов в процессе обучения русскому языку в национальных группах. Описаны приемы работы с видеоматериалом показано, что применение видео помогает воссозданию реальной действительности страны изучаемого языка.

Ключевые слова: обучение русскому языку, видео уроки, учебное видео, интерактивные задания, навыки аргументации, навыки слушания, медиа образования.

Yarmatova M.A.
senior lecturer
Department of Uzbek language and literature
Karshi Engineering and Economic Institute

FEATURES OF USING VIDEO MATERIALS IN RUSSIAN LANGUAGE LESSONS

Annotation. This article discusses the importance and effectiveness of using video materials in the process of teaching the Russian language to national groups. Techniques for working with video materials are described, showing that the use of video helps recreate the real-life environment of the country where the language is being studied.

Keywords: teaching Russian language, video lessons, educational videos, interactive assignments, argumentation skills, listening skills, media education.

Добавление видеоматериалов в образовательную структуру помогает активизировать внимание, мышление, память, эмоцию, повысить мотивацию. Использование видеоматериалов способствует развитию у студентов навыков самостоятельного труда, развивает навыки наблюдения и обобщения увиденного, активизирует процесс обучения. Использование видеоматериалов как средства наглядности становится основой эффективного обучения. Основные направления и формы работы с видеоматериалами описаны в работах отечественных и зарубежных исследователей [1, 2, 3 и др.].

Под термином «видео» (от лат. video- смотрю, вижу) понимают широкий спектр технологий записи, обработки, передачи, хранения и воспроизведения визуального и аудиовизуального материала на мониторе.

Одним достоинством видеофильма является сила впечатления и эмоционального воздействия на студентов, также помогает повысить мотивацию и активизировать процесс овладения знаниями, при этом развиваются внимание, мышление, память. «Видеоматериалы, представляющие собой сюжетные картины, наиболее полно отражают жизненные ситуации. Ситуативный контекст раскрывает мотивацию и цель высказывания, тем самым способствует языковой догадке и исключает необходимость перевода лексической единицы на родной язык учащихся» [6, с. 14]. Преимущество видео в том, что студенты имеют доступ к нему в любое время, его материалы могут быть использованы для самостоятельной работы. «Целесообразность использования видеоматериалов на занятиях по языку специальности объясняется прежде всего доступностью видеоматериалов, которые могут быть записаны с различных источников» [6, с. 16]. По мнению Е. Ф. Косицыной, И. В. Чирич, включение видеозаписи в учебный процесс «не только пробуждает у обучающихся интерес к изучаемому материалу, но и стимулирует к самостоятельному поиску путей и вариантов решения поставленной учебной задачи» [4, с. 79].

Можно использовать такие видеоматериалы, как:

- 1) учебное видео;
- 2) художественные и документальные фильмы;
- 3) мультфильмы;
- 4) видеозаписи телевизионных новостей и других телепередач;
- 5) музыкальные видеоклипы;
- 6) рекламу;
- 7) видео экскурсии по различным городам и музеям мира;
- 8) различные компьютерные программы с видеорядом и т.д.

Эффективность использования видеофильмов зависит от эффективной организации занятий.

Видеозаписи могут быть самой разной тематики. Выделяют учебные и аутентичные (оригинальное) видеоматериалы. Учебные видеоматериалы обладают познавательной ценностью и позволяют учитывать индивидуальные особенности обучаемых. Видео используется для презентации материала (средство наглядности), для дискуссии на определенную тему, для самостоятельной работы.

Как утверждают исследователи, видео можно применять на всех этапах обучения при разной степени владения языком студентов. Техника активного просмотра характеризуется тем, что внимание студентов фокусируется на основной идее видеофрагмента.

По отбору видео важно учитывать тему (соответствие темы фильма теме урока), цель использования фильма и его место в учебном процессе,

При работе с интерактивным видео можно опираться на классическую схему работы над аудированием, включающую три этапа: перед просмотром фильма, во время просмотра и после просмотра.

Цель первого этапа – ввести учащихся в эмоционально-смысловую атмосферу фильма, создать мотивацию для его просмотра. Для этого могут быть использованы следующие упражнения: - сообщение - беседа учителя о фильме и поднятых им проблемах; - предположение учащихся, о чем будет фильм.

Предварительная демонстрация

Прежде чем начать изучение учебного текста, надо продемонстрировать студентам видео, предваряющее учебный материал. К примеру, студенты должны ознакомиться с речевым этикетом «знакомство».

Перед просмотром в группе обсуждаются вопросы: В зависимости от уровня подготовки группы преподаватель может сам ввести минимальную необходимую информацию об особенностях русского речевого этикета или дать задание студентам подготовить эти вопросы заранее, разделив их между студентами, чтобы они выступили со своими небольшими сообщениями на уроке. Затем следует предварительная языковая работа – знакомство с лексикой, которые присутствуют в фильме.

На второй стадии в процессе просмотра фильма студенты выполняют интерактивные задания, встроенные в видео. Целью данных заданий является активизация внимания учащихся, проверка понимания фильма, а также тренировка навыков аудирования (в том числе и тренировка оперативной памяти). Цель второго этапа – уяснение студентами содержания, темы фильма, активизация речемыслительной деятельности обучающихся. Виды упражнений: - стоп-кадр (остановка фильма); - “молчаливый просмотр” (показ части фильма без звука, студенты должны догадаться, о чём говорят персонажи); - угадывание дальнейшего хода событий; - задание “дописать сценарий”; - ролевая игра (распределить роли и разыграть сцену из фильма); - прослушивание без просмотра (выключить изображение, слушая звук, рассказать, что происходит на экране); - восстановить текст (по ходу просмотра заполнить пропуски в написанном на доске тексте); - пересказ просмотренной части (одна половина группы смотрит эпизод и передаёт содержание другой половине аудитории).

После просмотра со студентами обсуждаются вопросы:

При изучении «Особенности русского речевого этикета» и порассуждать над следующими вопросами:

Почему важно закреплять этикет в детстве? Приведите примеры для подтверждения вашей позиции;

Какие ваши национальные пословицы отражают понятие речевого этикета? Приведите примеры;

В какой ситуации мы должны использовать этикет?

Какая форма обращения существует в русском языке?

Какие существуют виды этикета?

(Деловой, дипломатический, военный, педагогический, врачебный, поведение в общественных местах.)

Какие этикеты можно использовать при знакомстве в официальной обстановке?

Как переводится с французского языка слово «этикет»?

Такая работа по видеоматериалу поможет студентам овладеть навыками аргументации, навыками слушания и задавания вопросов.

Это могут быть тестовые задания, например:

Что такой речевой этикет?

то такое речевой этикет?

- A) это формулы вежливости и правила ведения разговора
- B) это формулы вежливости и правила ведения переписки
- C) это совокупность правил речевого поведения людей
- D) это усечённые формы ответных приветствий

Вопрос №4

Основой этикета является:

Основой этикета является

- A) вежливость
- B) сдержанность
- C) умеренность

Слово «этикет» имеет какие значения?

а) ярлык, этикетка. б) церемониал.

Вопросы служат для проверки понимания фильма и для подготовки к дискуссии. В завершении урока можно организовать обсуждение ряда проблемных вопросов, затронутых в фильме: почему надо соблюдать речевой этикет и т. п. Можно обсудить деловой этикет, этикеты народов мира, демонстрируемые в фильме, и сравнить их с этикетом родной культуры учащихся, тем самым вовлекая обучаемых в межкультурный диалог.

Цель третьего этапа – организация речевой творческой деятельности студентов. [22, 108] Виды упражнений, направленных на обучение говорению: - обсуждение фильма в целом; - упражнение на восстановление пропущенной реплики диалога из фильма; - этюдная работа с приемами актерского озвучивания; - фальшивая информация; - критика фильма; - персонализация; - сочинить продолжение фильма; - реклама фильма.

Видео является великолепным дополнительным материалом при изучении русского языка, так как оно максимально приближено к языковой реальности. Просмотр аутентичных видеоматериалов помогает созданию речевых образцов, служащих эталоном для речевой деятельности студентов, и, таким образом, способствуют развитию навыков говорения.

Использование видеоматериалов в учебном процессе способствует разнообразию и интересу к учению, делает учебный процесс более наглядным и нестандартным. Анализ видеоматериалов побуждает к творческому и осознанному выполнению заданий, что способствует более продуктивному обучению. Мы считаем, что использование различных средств медиа образования, включая кино и видеоматериалы, должно стать обязательным элементом педагогического процесса в системе образования.

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СОВРЕМЕННЫЕ ТЕХНОЛОГИИ УПРАВЛЕНИЯ ОРГАНИЗАЦИЕЙ

УДК 332.02

Маслова Н.С.
студент 3 курса бакалавриата
Научный руководитель: Легошич Н.В., к.э.н., доцент
доцент
кафедра логистики
Финансовый университет
при Правительстве Российской Федерации
Россия, Москва

ЗНАЧЕНИЕ ЦЕПЕЙ ПОСТАВОК В СОВРЕМЕННОМ БИЗНЕСЕ (НА ПРИМЕРЕ КОМПАНИИ ACER)

Аннотация. Цепи поставок становятся все более важным аспектом современного бизнеса. В данной статье анализируются цепи поставок международной компании Acer и ее ключевые элементы: состав, структура и характер взаимосвязей звеньев цепи. Результатом анализа являются выводы об эффективности текущей цепи поставок компании, а также рекомендации для их улучшения.

Ключевые слова: логистика, цепь поставок, поставщик, потребитель, логистический посредник.

Maslova N.S.
3th year student of bachelor course
Scientific Director: Levoshich N.V., PhD in Economics, doc.
associate professor
Department of Logistics
Financial University under the Government of the Russian Federation
Russia, Moscow

THE IMPORTANCE OF SUPPLY CHAINS IN MODERN BUSINESS (USING THE EXAMPLE OF ACER)

Abstract. Supply chains are becoming an increasingly important aspect of modern business. This article analyzes the supply chain of the international company Acer and its key elements: the composition, structure and links of the interconnections of the chain links. The analysis results in conclusions about the effectiveness of the company's current supply chain, as well as recommendations for its improvement.

Key words: logistics, supply chain, supplier, consumer, logistics intermediary.

Цель работы: провести анализ состава цепи поставок производителя персональных компьютеров Acer и сделать выводы о текущей эффективности.

Задачи: определить состав цепи поставок компании Acer, сделать выводы об эффективности текущей цепи поставок компании, предложить рекомендации по улучшению цепи поставок.

Материалы и методы. В рамках данной статьи был проведен анализ актуальной отечественной и зарубежной литературы с целью достижения поставленной цели. В ходе анализа применялся аналитический, сравнительный, индуктивный и дедуктивный методы.

Введение

Цепи поставок являются одним из ключевых элементов современного бизнеса. Правильная конфигурация цепей поставок позволяет компании минимизировать затраты на всех этапах, начиная от закупки материалов для производства товара до доставки готовой продукции конечным потребителям.

Анализ цепей поставок на примере компании Acer

Компания Acer является самой крупной компанией в Тайване по производству электроники [5]. По итогам 2023 года компания Acer представила следующие финансовые показатели: консолидированная выручка - \$7,631 млрд, валовая прибыль - \$816,53 млн, операционная прибыль - \$133,77 млн, чистая прибыль - \$155,91 млн [1].

Продажи персональных компьютеров и мониторов принесли компании 57,2 % операционного дохода [1]. В 2023 году компания Acer вошла в топ-10 в мире по количеству продаж персональных компьютеров, количество которых составило 15,9 миллионов штук. Общий рынок продаж компьютеров составил 241,9 миллион штук за год [2].

Рассмотрим цепи поставок персональных компьютеров производителя персональных компьютеров Acer. «**Уровень сложности цепи поставок** характеризует их состав, структуру и характер взаимосвязей фокусной компании с разноуровневыми поставщиками и потребителями» [4]. Компания Acer имеет расширенную цепь поставок, так как включает поставщиков и потребителей разных уровней. К поставщикам & уровня относятся предприятия, производящие комплектующие запчасти для компьютеров. Потребителями 1 уровня являются оптовые торговые сети, а потребителями 2 уровня - розничные торговые сети. Также у компании есть посредники, представляющие собой логистические фирмы и распределительные центры. В Таблице 1 представлены связи между звеньями цепи поставок компании.

Таблица 1 – Типы связей цепи поставок компании Асер

Тип связи	Характеристика связи
Управляемые связи	Между заводами компании и ее распределительными центрами [4], [6].
Отслеживаемые связи	Между распределительными центрами точками оптовой и розничной торговли [4], [6].
Неуправляемые связи	Связи с конечными потребителями, представленными физическими и юридическими лицами [4], [6].
Связи с объектами, не входящими в цепь поставок	связи с сервисными центрами и партнерами, которые обеспечивают гарантийное и постгарантийное обслуживание продукции; с акционерами; инвесторами и финансовыми учреждениями; государственными органами и организациями, которые устанавливают стандарты качества (в том числе ГОСТы), а также осуществляют регулирование деятельности компаний [4], [6].

Составлена автором на основе [4], [6]

Звенья цепи поставок компании Асер представлены в Таблице 2.

Таблица 2 - Звенья цепи поставок компании Асер

Звено цепи поставок	Характеристика
Поставщики	Compal, Coretronic, Daewoo, ECS, Huaqin, Lehui, Lengda, Qisda, Quanta, МОКА, TPV, Wistron, ADATA, AMD, AUO, BOE, Chicony Electronic, Chicony Power, CosMx, Delta, SIMPLO, GIS, Henghao, Innolux, Intel, Kingston, LG Energy Solution, LG Display, Lite-On, Micron, Murata, Nvidia, Panasonic, Samsung, Seagate, SK Hynix, Toshiba [4], [6].
Посредники логистических услуг	DHL, UPS, FedEx [4], [6].
Потребители	сети Amazon, Best Buy, MediaMarket, Dixons Carphone, Fnac, Bic Camera, Harvey Norman, Lazada, Tmall, DNS [4], [6].

Составлена автором на основе [4], [6]

В компании Асер цепь поставок относится к горизонтальной, так как ее звенья относятся к разным владельцам, и для организации эффективной работы компании вынуждены договариваться об условиях функционирования цепи поставок. Цепи поставок Асер имеют структуру, представленную на Рис.1.

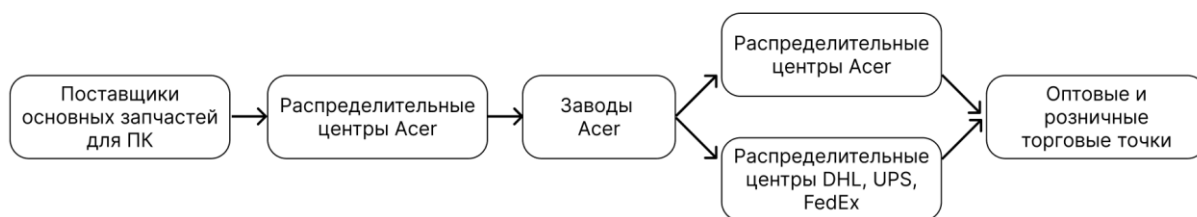


Рис.1 – Структурная конфигурация цепи поставок компании ACER.
Составлен автором на основе [6]

Компания Acer сотрудничает с несколькими логистическими компаниями, поставщиками и потребителями, так как это позволяет выбирать оптимальные варианты доставки с учетом географии и цены перевозки. Также за счет этого Acer уменьшает риски, связанные с задержками в перевозках, и обеспечивает гибкое управление логистическими процессами. Таким образом стоит отметить, что цепи поставок компании Acer являются очень гибкими и надежными, так как у них большое количество поставщиков, потребителей и логистических посредников.

Рекомендации по улучшению цепи поставок:

Для улучшения цепей поставок компания может расширять ее, начав производство новой продукции или предложив потребителям новые сервисы и услуги. Также Acer может рассмотреть рекламу и доставку своей техники в те регионы, в которых пока их продукция не распространена, тем самым расширив свою зону продаж и увеличив количество покупателей.

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*Никифорова А.А.
студент
Оренбургский государственный университет
Россия, Оренбург*

НАПРАВЛЕНИЯ ДЛЯ ПОВЫШЕНИЯ ЭФФЕКТИВНОСТИ ИСПОЛЬЗОВАНИЯ КАДРОВОГО ПЕРСОНАЛА В ОРГАНИЗАЦИИ

Аннотация. Одной из важнейших характеристик и основ эффективности функционирования организации являются кадры. К сожалению, в настоящее время в научной и учебной литературе отсутствует единое понимание термина «кадровый потенциал». Причинами такого пробела послужило относительно недавнее введение данного термина в научный оборот, а во-вторых определение всегда дается под призмой того исследования и проблематики в рамках которого оно рассматривается.

В данной статье автором предложены направления для повышения эффективности использования кадрового потенциала в организации.

Ключевые слова: кадровый потенциал, цели организации, эффективность.

*Nikiforova A.A.
student
Orenburg State University
Russia, Orenburg*

DIRECTIONS FOR IMPROVING THE EFFICIENCY OF THE USE OF HUMAN RESOURCES IN THE ORGANIZATION

Annotation. One of the most important characteristics and fundamentals of the effectiveness of the organization's functioning is personnel. Unfortunately, there is currently no common understanding of the term "human resources potential" in the scientific and educational literature. The reasons for this gap were the relatively recent introduction of this term into scientific circulation, and secondly, the definition is always given through the prism of the research and issues within which it is considered.

In this article, the author suggests ways to improve the efficiency of using human resources in the organization.

Keywords: human resources potential, organization goals, efficiency.

Для достижения высокой результативности выполнения поставленных задач государственными служащими необходимо

обеспечивать постоянное обновление профессиональных знаний и непрерывное снабжение государственных структур необходимым количеством квалифицированных сотрудников. Поддержание эффективности в работе сотрудников требует постоянного развития и повышения уровня квалификации персонала. Кадровый консалтинг, как инструмент диагностики кадрового потенциала, включает в себя оценку результативности взаимодействия подразделений, проверку обоснованности и целесообразности иерархии должностного подчинения, а также анализ корпоративной культуры и системы мотивации персонала.

Анализ кадрового потенциала может стать ключевым фактором улучшения качества труда и профессионального роста, способствуя удовлетворению социальных потребностей как личности, так и коллектива. Однако, для достижения этой цели необходимо учитывать коллективное мнение по результатам работы, а не только точку зрения администрации.

Все оценки становятся конфликтными, когда интересы коллектива и администрации противоречат друг другу. Это приводит к появлению двойных стандартов в оценках. Коллективы часто играют роль ведомых в анализе кадрового потенциала из-за навязанной административным аппаратом точки зрения на работника. Необходимо особо подчеркнуть, что удовлетворение социальных потребностей личности становится фактором, вызывающим конфликты.

С целью совершенствования формирования и развития кадрового потенциала можно предложить ряд рекомендаций:

- разработка индивидуального плана развития (ИПР) резервиста в зависимости от планируемой должности для назначения кандидата и перспективности назначения на должность;
- усовершенствование системы адаптации вновь назначенных сотрудников, в т.ч. внешних, с целью развития кадрового потенциала;
- осуществление практической подготовки кандидата из кадрового резерва;
- разработка мероприятий в течение года по повышению вовлеченности кандидатов.

Рассмотрим детально предлагаемые рекомендации.

Разработка индивидуального плана развития (ИПР) резервиста в зависимости от планируемой должности для назначения кандидата и перспективности назначения на должность. Основным инструментом резервиста в рамках развития на запланированную должность – индивидуальный план развития, составленный резервистом и утвержденный руководителем. Считаю целесообразным использование ресурса сторонних специалистов (коуч-тренеров) с целью качественной проработки плана совместно с руководителем, на должность которого рассматривается кандидат, а также проведение указанным составом

промежуточных (например, 1 раз в квартал) итогов по реализации данного плана и определения необходимых дополнительных ресурсов.

Имеющийся ресурс в виде карьерного консультанта HR-подразделения разово перед составлением ИПР не является эффективным. Системное использование ИПР обеспечивает:

- возможность видеть менеджерский потенциал компании и прогнозировать возможности ее развития;
- контроль процессов обучения и развития. Зная ИПР своих менеджеров, компания сможет более точно проводить кадровую политику;
- направленность усилий в рамках стратегии компании.

Участвуя в составлении ИПР посредством внешних и внутренних консультантов, компания помогает менеджерам выделять приоритеты и расставлять акценты при обучении и развитии согласно стратегии.

Эффективная адаптация новых сотрудников - это долгосрочный и многоэтапный процесс, который не заканчивается за один день. Когда адаптация проводится систематически и успешно, новый сотрудник может начать продуктивно работать уже через несколько месяцев. В противном случае, без должной структурированности, полноценная адаптация может занять до года. Реализация стратегий по улучшению этого процесса поможет не только уменьшить текучесть кадров, но и улучшить общую производительность персонала, снизить количество случаев нарушения трудовой дисциплины, повысить качество взаимодействия в коллективе и, в конечном итоге, увеличить удовлетворенность клиентов качеством продукции.

В связи с рядом проблем и отсутствием систематизированного подхода к адаптации в ПАО Сбербанк, предлагается создать документ, называемый Положением об адаптации. Этот документ должен ясно и подробно описывать процесс интеграции новых сотрудников в компанию или их переход на новую должность в течение адаптационного периода. Основная цель этого Положения - обеспечить понятное и одинаковое введение для всех новичков. В рамках Положения планируется использовать как индивидуальные методы работы с работниками, например, ориентационные беседы, так и коллективные подходы, включая адаптационные тренинги.

В рамках адаптации новых сотрудников, особое внимание уделяется индивидуальному подходу в работе с ними, что является ключевым аспектом специализированной части соответствующего Положения. Эффективность такого подхода подтверждается улучшением результатов трудовой деятельности сотрудников с самого начала их работы, а также сохранением и передачей знаний и навыков, накопленных в компании. Руководители подразделений несут ответственность за внедрение этих адаптационных мероприятий, подчеркивая важность привлечения опытных

наставников для облегчения интеграции новичков в коллектив и освоения ими своих должностных обязанностей.

ПАО «Сбербанк» разрабатывает систему адаптации персонала, задокументированную в Положении об адаптации, которое руководители подразделений и кадровые менеджеры обязаны исполнять, ознакомившись с ним под расписку. Основная задача для сотрудника при этом - интегрироваться в коллектив организации как можно быстрее и эффективнее, создать для себя репутацию профессионала и стремиться быть частью команды на длительный срок.

Для избежания неопределенностей в распределении обязанностей между руководителями подразделений и специалистами по персоналу, необходимо ясно определить сферы их ответственности. В документе о процессе адаптации новых сотрудников следует четко указывать, кто и как будет взаимодействовать с новичками. Кроме того, важно детально описать все адаптационные мероприятия, которые предусмотрены для новых сотрудников на первую неделю, включая имена ответственных лиц. Такое подробное описание помогает предотвратить возможные разночтения и отклонения от выполнения задач.

В документе, известном как положение об адаптации персонала, четко определены области ответственности всех ключевых участников процесса адаптации. Руководитель подразделения должен заниматься профессиональными аспектами и общей работой подразделения, где трудится новый сотрудник. В то же время, задачи по социализации, взаимодействию и освоению корпоративной культуры ложатся на плечи отдела кадров. Осуществление практической подготовки кандидата из кадрового резерва. В режиме высокой нагрузки и отсутствия времени в рамках рабочего процесса необходимо организовать стажировки с отрывом от производственного процесса сроком до двух недель минимально, проведение круглых столов, бизнес-игр, мозгового штурма с целью развития необходимых навыков у кандидатов.

Предусмотреть в рамках развития компетенций следующие мероприятия:

- проведение стажировок с целью практического освоения непосредственно на рабочем месте навыков выполнения работы или группы работ;
- дублирование каких-либо функций на рабочем месте, исполняемые под наблюдением лица, ответственного за подготовку работника;
- исполнение обязанностей руководителя во время его отсутствия;
- временное перемещение сотрудника на другие должности структурного подразделения (по горизонтали и вертикали) с целью освоения навыков работы на других должностях (ротация).

Разработка мероприятий в течение года по повышению вовлеченности кандидатов. Актуальным считаем проведение круглых столов

Лидер учит лидеров и проектных групп с целью вовлечения резервистов и решения актуальных важных/проблемных вопросов для организации, участие в подготовке, реализации проектов структурного подразделения, территориального банка, центрального аппарата.

Кроме того, все перечисленные и ныне проводимые мероприятия имеют максимальную эффективность при взаимодействии резервиста, действующего руководителя, руководителя планируемой к назначению должности, курирующие подразделения.

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*Akhmedova N.I.
assistant-teacher*

*Department of Teaching Languages
SamIES*

LINGUISTIC PROBLEMS OF INTERCULTURAL COMMUNICATION

Annotation. The aim of the article is to enlighten linguistic problems of intercultural communication as well as to reveal similarities and differences in structural-grammatical, lexical-morphological, pragmatic and cultural aspects and to define linguistic and extra linguistic factors of emerging language-related problems in the process of intercultural communication.

Key words: intercultural communication, phrases, expressions, non-native, replica, misunderstanding, linguistic problems, speech, national symbols.

The English language is so rich in phrases and set expressions that we face problems in correct choice in translation. A good translator should be aware of meaning of such phrases and set expressions. Some gestures, mimics can also be helpful for guessing the meaning which speaker wants to express by using them in his/her speech. Sometimes even words can't be translated from one language into another because they can be used in one language in metaphorical way and in the process of translation into another language they cause fun, surprise, misunderstanding and even offence. For example, when we ask someone "Are you a lark or an owl?" we mean a natural temper of a person who is more energized in the first half of the day (lark) or, on the contrary, a person who is active in the second half of the day (owl). If we translate these words into Uzbek and ask someone, it will seem funny.

Linguistic problems of intercultural communication are clearly seen in today's modern stage of society development which requires more and more communication with foreign partners. Almost all of them despite their nationality are good speakers of English. English is a top language of intercultural communication: almost all international conferences, competitions and meetings are held in English.

The English language is rich in phrases, clichés, speech formulas and set expressions which are registered in special dictionaries and are used in everyday speech for various communicative aims. English is learnt and taught in almost all countries of the world. Statistic data shows that more than 70% of English speakers are non-native. This means that English isn't their mother tongue. Perfect knowledge of English isn't enough for perfect communication between native English speakers and non-native ones. Why? The answer is vivid: they belong to different language cultures and are aware of their native language specifics due to

historical, religious, cultural, national background of their language functioning. When an intercultural dialogue takes place between speakers of different lingual cultures there appears a definite misbalance between expressions in two different languages, e.g. English and Uzbek. [4,639]

What do most of non-native English speakers usually do? Often they use some expressions which exist in their native language and translate them into English. This often leads to incorrect, even rude attitude to native English speaker. That's why non-native specialists of English who deal with the sphere of international communication should deeply study phrases and expressions which really exist in English and which are really used in this or that situation. So, linguistic problem of intercultural communication is actual: it deals with communication between representatives of different language cultures. Preparation of competent specialists in this sphere becomes necessary in our country because Uzbekistan develops relations with world countries in different spheres. Correct use of English expressions in intercultural communication plays an important role, certainly.

The most frequent reason of using incorrect expressions in speech act using them in communication process is word-for-word translation. This idea was proved by Lynn Visson in her research work "Where Russians Go Wrong in Spoken English: Words and Expressions in the Context of Two Cultures". In this book the author points that frequently used American English phrases "I gonna" instead of "I am going" or "I wanna" instead of "I want to" are incorrect and rude. Once the author became the witness of the situation, when a Russian woman asked someone not to open a window by saying: "Don't open the window". This sentence seemed rather rude and acquired the accent of order. In this case she should say: "It is not necessary to open the window" [2, 167]. The meaning of the second sentence is the same but it possesses the form of politeness.

If we investigate expressions in the English and Uzbek language systems we will find a lot of similar examples when phrases can't be just translated from one language into another. The problem is not in the choice of words but in the choice of correctness of using this or that expression in a definite situation. English non-native speakers should know when to use and how to use different English phrases in exact situations. It is a frequent replica to say "Keling" (in singular) or "Kelinglar" (in plural) in the Uzbek lingual culture. These expressions are translated as "Come" (Invitation to come). Uzbek people are very hospitable and usually say this phrase when they meet their relatives, neighbours or friends in a street, shop, park, etc. If we say equivalent English phrase like "Come to my place (home)" to an English native speaker, he or she will ask about the time and reason of invitation because Englishmen don't use such phrase just as a common expression of familiar communication. They can say it only in case when they really plan to invite someone to their home. When Uzbek people have guests at their home, laying table is a necessary procedure. They often use expression "Dasturxonga qarang" thus asking guests to take food and feel at ease. Word-for-

word translation of this expression is “Look at the table-cloth”. Such phrase doesn’t exist in English, so one should say “Help yourself / (yourselves)”.

We come across with difficulty in finding Uzbek analogical phrase of the English phraseological unit “zoo daddy”, which means “a divorced man with the right to see his child (children) on weekend and take them to zoo, park, etc.” The phrase consists of two common words which together make up a phrase that doesn’t match to Uzbek national culture. We can’t find similar phraseological unit in the Uzbek language because there is no such Uzbek phraseological unit which characterizes a divorced man with the right to see children on week-ends. In such cases we should only give lexical explanation of the English phrase. So, most of idiomatic expressions make translators feel baffled in the process of rendering them from one language into another. Idioms are expressions that don’t mean what they appear to mean [1, 34]. For example, when we say “It’s raining cats and dogs” we mean that “it’s raining heavily”. But we can’t use the same components of the phrase (cats and dogs) in Uzbek for characterizing a heavy rain.

Like single words, idioms and fixed expressions may be culturally specific [59, 42]. Thus, in using various expressions in communication with native English speakers we should pay attention to national and cultural peculiarities of the English language culture and their function in speech act. It may happen that the same notions or even colours can express different meaning in various linguocultures. For example, there are red crosses in national flags of both countries: Uzbekistan and the UK. But they symbolize different features: in the flag of the UK Red Cross is presented as St. George’s Cross and takes its origins in the Crusades, when soldiers were identified by this red coloured cross on their white tunics. St. George was claimed to be the Patron Saint of England at that time, so the cross is associated with him. In the national flag of Uzbekistan two red crosses symbolize life and power.

Animals also can be national symbols: bird “Humo” in the emblem of Uzbekistan is a symbol of happiness and peace. The Lion expresses bravery and depicts courage of English warriors in English emblem. Today, this animal remains the national emblem of the country as well as it is used extensively in sports: team’s names, icons and so on. When it comes to the matter of intercultural communication as it was mentioned before, we may experience lots of challenges in translating some words or finding their equivalents because their meaning relates to any cultural realia and has national specifics. Only in case when there are similar notions of a definite custom or tradition in both languages, equivalents can be easily found. In other cases when a custom is unique and nationally specific, it has no analogues in another linguoculture. For example, every year English people celebrate Halloween on the 31st of October. Halloween is originated as a pagan festival in parts of northern Europe, particularly, around what is now the United Kingdom. Many European cultural traditions hold that Halloween is a time when magic is most patent and spirits can maintain contact

with the material world. The aim of this holiday is to create fun: pumpkin is the most important tool. Talking about this holiday, we can't find a similar custom in our country. So, one should explain the details of celebration and origin of this holiday. [5,378]

Another similar example is the holiday that belongs to our national culture: Navruz, which is celebrated on the 21st of March. This holiday represents our long history, rich cultural traditions and people's attitude to each other. This is a unique holiday that can be described to foreign people by describing its celebration and using pictures, photos, videos. At the same time we have similar international holiday named "New Year". The name and way of celebrating this holiday is almost the same in many countries: decoration of New Year Tree, putting presents under it, cooking delicious food, fireworks, decorations, Santa Claus, etc. So, when we talk about New Year holiday, the foreigners are already aware of its celebration in comparison with above mentioned Navruz, which has nothing common with the English culture.

The phrase "to take one's chance" can be translated "to use someone's opportunity". But the real meaning of this expression in communication would be "to make a risk" which is a bit different from translation. When a speaker wants to make a compliment he may say "smile becomes you", which means "smile suits you or makes you more beautiful". But this compliment can be expressed in suitable situation and context. In such cases a translator should be very attentive not only to the meaning but also to the context and surrounding situation as they are not less important than the language itself [3, 344]. Besides, religious and moral principles are essential in this case, especially when a man intends to make a compliment to a woman. The phrase "pretty bad" consists of two words which are semantically opposed to each other. But when a speaker points at any seriously difficult situation, he/she uses this phrase. Learning a language just for official communication seems not be very difficult at first, but intercultural communication is always rather complicated in different spheres of human activity.

As we see, a language is more acquirable in the aspects of culture, traditions and customs. In this way a learner studies the language by taking part in special ceremonies, meetings, parties and enriches his/her lexicon by listening and speaking to native bearers of the language

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A TERM IS A SPECIFIC PURPOSE LANGUAGE

Annotation. The article talks about the established position of terminology as a science in terms of terms related to the field of tourism, and the concept of "terminology" means a set of terms related to a specific field of knowledge, unlike its meaning in other foreign scientific sources and educational publications.

Key words: Terminology, terminosphere, terminosistem, problems of synonymy and polysemy, hybrid terms and pure terms.

Introduction. The term has a generalizing character and summarizes the definitions of the essence of the term proposed by leading researchers in different years and terms acquire their uniqueness as a single-meaning word belonging to a separate lexical group that arises in the scientific-practical activities of persons with certain scientific and professional knowledge, and is directly used by them, as well as the use of a terminological unit in a specific situation increases the effectiveness of professional communication and communicative capabilities of specialists, their creates an atmosphere of mutual understanding.

Literature analysis on the subject: In the initial period of the history of terminology, which lasted until the early 1960s, a number of basic concepts such as "terminosystem" (D.S. Lotte), "terminological field" (L.A. Kapanadze) were formed. For example, as D. Sageder noted: "Rapid development and development of technologies required not only the naming of new concepts, but also agreement on the use of terms. Practical result terminological work began to be organized within certain specialized fields (specialties)".

A.V. Superanskaya defines it as follows: "The term is a special word adopted in a certain professional activity and used in certain fields and conditions. A term is a concept included in the system of concepts of a certain field of professional knowledge, which is expressed in words. A term is a basic conceptual element of a special-purpose language. Within its terminological field, the term is used in one sense. The same pronounced terms of different fields are homonyms. For its correct understanding, the term requires a special definition (exact scientific definition)".

Research methodology. Linguistic description, comparative-typological (comparative), semantic-methodical, diachronic, synchronic, component analysis, statistical analysis, lexical-syntactic, lexical-semantic methods were used in the article.

Analysis and results. In 1969, at the scientific symposium held at the Moscow State University named after M.V. Lomonosov, the concept of terminology was officially recognized and put into use. As a result, the position

of terminology as a science was determined, and the scope of the concept of "terminology" was limited, and it began to mean a set of terms related to a specific field of knowledge, unlike its meaning in other foreign scientific sources, educational publications. In some foreign scientific sources and educational literature, "terminology" is used as a branch of science or there are debates about the status of terminology as a separate scientific discipline. Terminology is a science focused on the study of lexical elements - terms, which are modified from elements existing in other fields, used in specialized fields and arise in such fields. Terminology involves the compilation, description and re-creation of terms. Some authors make a distinction between terminology and terminography (like the distinction between lexicology and lexicography). Terminography in this case means the art of creating "terminologies" and "special dictionaries". Thus, according to the authors' point of view, terminology includes a theoretical component and the result of the combination of terminological theory and practice (specialized dictionaries). Terminology is an independent field, with a special theory and methodology of a special vocabulary of the language.

Diversity in the understanding of terminology (in Russian linguistics) exists in foreign language science as well as in Uzbek linguistics. D.Sageder writes about the difference of views on the essence of terminology: The views on terminology as a scientific discipline are quite diverse. Currently, there are different interpretations of this field and a number of controversial issues related to it. Is terminology a science or just a method? Does terminology have the status of a separate humanities with its own theory, or should it be grateful for its theoretical possibilities to relatively consolidated disciplines, a theoretically stable body of science? The importance of the science of terminology cannot be underestimated. It should be viewed as a historically significant force due to its evolution and forward movement in the rapidly changing world of modern technology.

A detailed review of the works of Anglo-American researchers devoted to terms and terminology is covered in the study of V.V. Kasyanov. According to the author, the statements about the uniformity of the points of view in the works of these scientists require an explanation; A deeper study and analysis of the theoretical and practical materials of Anglo-American linguists reveals theoretical differences in their interpretations regarding the uniqueness of terms and their difference from the common dictionary.

The conclusions of V.V. Kasyanov were confirmed in a recent study by a representative of Slovak linguistics: Kabre and Kageura studies on terminology have a clearly focused goal, which can serve as a foundation for the methodology of this field, giving it the status of an independent science. is to determine the characteristics that serve as the basis from the theoretical point of view.

S.D. Shelov analyzed the definitions of V.P.Danilenko, K.Ya.Averbukh, V.M.Leychik and other experts aimed at revealing the essence of the term and offered a generalized definition of the term. According to this definition, "if a

language symbol (word combination, compound word, word combination with separate symbols, etc.) expresses a concept related to some field of knowledge, at the same time, those who use this language symbol have a definition (explanation, explanation) consciously chosen., it is considered a term". Many researches have been conducted on the issues of "term" and "terminology", which have been used since the beginning, and various definitions have been given. The lexeme "term" comes from the Latin word "terminus" and means "end", "limit", "boundary", "end". According to P. Nishonov, "a term is a word or a word combination according to its structure, it is a lexical unit that is semantically limited to the scope of a special field and expresses the concept related to this field". A term is a word that is unconditionally (compulsorily) related (comparable) to a certain unit in the system of specific logical concepts. Defining the term as an object of linguistics and its systematic study motivated the formation of explanations (definitions) of the concept of "term", the description of the term, the development of solutions to problems related to it, and finally, the emergence of the science of terminology. The term took a firm place in the system of lexical-grammatical concepts and became a "full-fledged member" of the lexical-semantic system of the language.

According to A. Reformatsky, the term is not "just a word", but it is an "unusual" or "new word", even if it can be "rationalized" and even "invented", it is first of all a word. Professor S. Usmonov's researches are of great importance for terminology, and the term "...any innovations in the field of production tools, as well as in the field of culture and science, are first expressed through language units, or rather, terms. In this sense, terminology (a set of terms in a certain language) is a witness, a mirror of modern history", defines. In our opinion, the term, according to its linguistic nature, is an integral part of the vocabulary system of the literary language, and differs from other categories of words by its clear, concise expression of scientific, technical or other professional concepts and its wealth of information.

The definition proposed by S.D. Shelov, in our opinion, is relevant according to the following principles:

a) has a generalizing character and summarizes the definitions of the essence of the term proposed by leading researchers in different years;

b) the terms become unique as a single-meaning word belonging to a separate lexical group that arises in the scientific-practical activities of persons with certain scientific and professional knowledge and is directly used by them;

c) the use of the terminological unit in a specific situation increases the effectiveness of professional communication and communicative capabilities of specialists, and creates an environment for their correct understanding of each other.

As N.V. Serbinovskaya noted, "the term is associated with other related (similar) phenomena - nomen, professionalisms, terminoids, etc. differs from". In the work of R. Doniyorov, "The difference between the term and professionalisms

is that the term is the expression and name of a concept that is official and legalized in a specific science, industrial field, agriculture, technology. "Professionalism is a semi-official word that is widely used in the language of a profession, specialty, in many cases in a scientific style, and does not have a strict, scientific description of the concept".

Today, concepts such as terminology and terminosphere, which are related to terms and terminology, are often used in linguistics. In this sense, "in the absence of a universally accepted definition, each researcher writes his own definition and interpretation of the "worker".

Linguistics, which is the main factor behind the emergence of the concept of "terminosphere" according to linguistic terminology, is a dynamic, self-renewing and continuously developing science, like any other science. Accordingly, the system of scientific concepts is in the stage of continuous development and change in order to be able to perfectly, accurately and objectively assess the level of human knowledge. The change of the system of scientific concepts of any developing science and acquisition of a special meaning was emphasized by V.I. Siforov in 1974.

At the current stage of the development of terminology, the same trend is observed in relation to the linguistic concept of "terminosphere". The unanimous definition or interpretation of this concept is not covered in the following dictionaries and dictionary-references of world linguists: "Slovar lingvisticheskikh terminov" (O.S. Akhmanova), "Slovar-spravochnik lingvisticheskikh terminov" (D.E.Rosenthal M.A.Telenkova), "Lingvistichesky entsiklopedichesky slovar" (V.N.Yartsev), "Slovar sotsiolingvisticheskikh terminov", slovar-spravochnik "Terminy i ponyatiya lingvistiki: Obshchee yazykoznanie. Sociolinguistics" T.V. Jerebilo; Slovar po yazykoznaniiyu (Dictionary of language knowledge); Slovar sotsiolingvisticheskikh terminov (Dictionary of Eleumet's linguistic terms), etc. Nevertheless, the concept of "terminosphere" is actively used in scientific literature. This indicates that the concept is actively used in the scientific languages of some CIS countries, in particular, in the Uzbek and Kazakh languages, along with the Russian scientific method.

In the researches of Kyu Kageura, a leading expert in the field of terminology of English-American linguists, one can find such words as "a terminological sphere" (terminological shell) and "a terminological space" (terminological space). Based on the importance of terminology as an independent science, if any lexical unit is considered a term, then it is located in a previously existing terminological space; thus proves that he introduces the concept of terminology as a sum of "terminological units", as an empirical materialization [218;]. It is worth noting that, unlike the terminological sphere related to the linguistic text, there is always a terminological field that can be a component of the lexical sphere.

Table 1

Term units located at the boundary of the universal lexicon

<i>English</i>	<i>русча</i>	<i>O'zbekcha</i>
<i>agrotourism</i>	<i>агротуризм</i>	<i>agroturizm</i>
<i>tour package</i>	<i>тур пакет</i>	<i>tur paketi</i>
<i>jeep safari</i>	<i>джип-сафари</i>	<i>jip safari</i>
<i>on-your-own package</i>	<i>самостоятельный тур</i>	<i>o'z-o'zidan sayohat</i>
<i>rural tourism</i>	<i>сельский туризм</i>	<i>qishloq turizmi</i>
<i>check-in</i>	<i>регистриваться</i>	<i>ro'yxatdan o'tish</i>
<i>check-out</i>	<i>проверить</i>	<i>tekshirish</i>
<i>Boutique hotel</i>	<i>бутик-отель</i>	<i>butik mehmonxona</i>
<i>flotel</i>	<i>флотель</i>	<i>suzuvchi</i>
<i>tour leader</i>	<i>гид</i>	<i>gid</i>
<i>tour operator</i>	<i>тур-оператор</i>	<i>turoperator</i>
<i>tour manager</i>	<i>тур-менеджер</i>	<i>ekskursiya menejeri</i>
<i>catering service</i>	<i>Служба общественного питания</i>	<i>ovqatlanish xizmati</i>

Conclusion: Thus, according to K. Kageura's point of view, the terms "terminological sphere" and "terminological space" enter into a systematic relationship with other terms, settle among them and manifest a certain environment that forms a terminological system. It is worth noting that, unlike the terminological sphere related to the linguistic text, there is always a terminological field that can be a component of the lexical sphere. According to the linguistic approach, terms are interpreted as an object characterized by systematicity and expressed through a scientific definition. In most cases, the term is not affected by the context. It is methodologically neutral and is mainly used in functional environments, that is, in texts and documents used by specialists and researchers in various fields of knowledge. Interdisciplinary terminological units interact and form the core of the terminological field as a whole.

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THEORETICAL CONSIDERATIONS OF THE TERMINOSYSTEM IN TOURISM

Abstract. The article talks about the theoretical views on the terms related to the field of tourism, the definition of the term as a linguistic object and its systematic study and the system of lexical-grammatical concepts of the term.

Key words: Term, terminology, terminosphere, terminosis, problems of synonymy and polysemy, hybrid terms and pure terms.

Introduction: In world linguistics, a number of linguistic studies have been carried out dedicated to the study of a specific linguistic unit - term, which has acquired a special terminological meaning. The scientific-philosophical interest in the nature of the term determined as a result of the sharp rise in the development of science and technology and the rapid development of production and industry in the 19th century created the ground for such research. In the 18th and 19th centuries, the problems of terminology became the focus of attention of linguists. One of the main reasons for this is related to the creation of terms, and the second reason is the influence of extra linguistic factors on terminology. However, they were more concerned with the problems of synonymy and polysemy encountered in terminology, as well as the paradigmatic and syntagmatic relations of term-lexemas, hybrid terms and pure terms in context, and the variety of interactions with certain concepts.

Literature analysis on the subject: A detailed review of the works of Anglo-American researchers devoted to terms and terminology is covered in the study of V.V. Kasyanov. According to the author, the statements about the uniformity of the points of view in the works of these scientists - explaining; A deeper study and analysis of the theoretical and practical materials of Anglo-American linguists reveals theoretical differences in their interpretations regarding the uniqueness of terms and their difference from the common dictionary.

The conclusions of V. V. Kasyanov were confirmed in a recent study by a representative of Slovak linguistics: Kabre and Kageura studies on terminology have a clearly focused goal, which can serve as a foundation for the methodology of this field, giving it the status of an independent science. is to determine the characteristics that serve as the basis from the theoretical point of view. Nevertheless, they both emphasize the need for future research and collaborative efforts to allow the emergence of an appropriate theoretical model. It is not easy to fulfil this task due to the lack of communication between specialists, the

development of the subjects of the debate in different ways and the variable perception.

Research methodology. Linguistic description, comparative-typological (comparative), semantic-methodical, diachronic, synchronic, component analysis, statistical analysis, lexical-syntactic, lexical-semantic methods were used in the article.

Analysis and results. Many researches have been conducted on the issues of "term" and "terminology", which have been used since the beginning, and various definitions have been given. The lexeme "term" comes from the Latin word "terminus", which means "end", "limit", "boundary", "end". According to P. Nishonov, "a term is a word or a combination of words according to its structure, it is a lexical unit that is limited by the scope of a special field in terms of semantics and expresses the concept related to this field". A term is a word that is unconditionally (compulsorily) related (comparable) to a certain unit in the system of specific logical concepts. Defining the term as an object of linguistics and its systematic study motivated the formation of explanations (definitions) of the concept of "term", the description of the term, the development of solutions to problems related to it, and finally, the emergence of the science of terminology. The term took a firm place in the system of lexical-grammatical concepts and became a "full-fledged member" of the lexical-semantic system of the language. According to A. Reformatsky, the term is not "just a word", but it is, first of all, a word, even if it is "unusual" or "new word", it can be "rationalized" and even "invented". Professor S. Usmonov's researches are of great importance for terminology, and the term "...any innovations in the field of production tools, as well as in the field of culture and science, are first expressed through language units, or rather, terms. In this sense, terminology (a set of terms in a certain language) is a witness, a mirror of modern history. In our opinion, the term, according to its linguistic nature, is an integral part of the vocabulary system of the literary language, and differs from other categories of words by its clear, concise expression of scientific, technical or other professional concepts and its wealth of information.

Today, the tourism terminology in our country is at the stage of formation and development, and in this process, the tourism terminology of Russian, Arabic and Turkish languages also plays an important role in the integral historical and interrelationship with the English language tourism terminology, which is considered a globally recognized tool of international communication. The study of the interaction of languages is a priority of linguistics. is considered one of the directions, and in this regard, it is important to research the Uzbek language tourism terminology, to reveal its national and international features. Based on the principles of development, the demand of the present day arises from the need to "stimulate scientific research and innovation activities, to create effective mechanisms for the implementation of scientific and innovative achievements" [4;] in the teaching of various systematic languages, students should be taught the

lexical-semantics of professional terms in a foreign language., consists of teaching grammatical, functional-structural aspects. After all, in the training of specialists in the field of tourism, the system of tourism terms related to the field has been thoroughly researched on a scientific basis, the scope of conducting scientific research on determining the general and specific aspects in Uzbek and foreign languages, and it creates ample opportunities to further increase the efficiency index.

In recent years, the words "term", "term", "nomenclature" have been widely used. According to the national encyclopedia of Uzbekistan, along with the word "term", the words "term" and "istilah" are also used in the same sense. But they cannot express the full meaning of the word "term". The word "term" is used in a broad sense and is applied to geographical objects, famous names, and the word "revolution" can be used freely in texts on historical topics (for example: history of literature, Eastern philosophy, etc.). S. According to Usmanov: "...the meaning of the word term is broader than the meaning of the word term, it is understood as the name of all things, and the term is a formalized word used in a certain narrow field. In this sense, the concept of term is a scientific-lexical unit included in the concept of "term".

In his research, O. Akhmedov distinguished the concepts of "term", "term", "term", "nomenclature" and said that "Terms actually have a lexical-semantic universal form, and they pass to the common language through a specific terminological system. After all, terms and common words are lexical units that complement each other," he says. Thus, terminology is one of the factors that form the lexicon of this language.

The concept of nomenclature is defined in the encyclopaedic dictionary as "Nomenclature (lat. nomenclature) - a list, a list of names, as well as a list of specific terms and category names used in the field of science, technology, law and economics." In addition, P.P. Nishonov "The term applied to an object or reality, first of all, defines and classifies this object or reality. This is not observed in the nomenclature. Their function is limited to naming things and objects. Therefore, "term" is a broad and clear concept in relation to nomenclature, meaning a word with a special function, while "nomenclature" is a term that serves to name similar objects and concepts.

We found it necessary to use the international lexemes "term" and "terminology" in our research.

The old view that terms represent the periphery of the language lexicon has already been rejected. Terms have all the characteristics of natural language lexical units. However, one of the most important directions of lexicology is the determination of the composition of terms related to a specific field of science, their arrangement, the unification of terms and the creation of terms for new scientific and technical fields.

A.V. Superanskaya defines it as follows: "The term is a special word adopted in a certain professional activity and used in certain fields and conditions.

A term is a concept included in the system of concepts of a certain field of professional knowledge, which is expressed in words. A term is a basic conceptual element of a special-purpose language. Within its terminological field, the term is used in one sense. The same pronounced terms of different fields are homonyms. For its correct understanding, the term requires a special definition (exact scientific definition).

Terminology is a science focused on the study of lexical elements - terms, modified from existing elements in other fields, used in specialized fields and created in such fields. Terminology involves the compilation, description and re-creation of terms. <...>. Some authors make a distinction between terminology and terminography (like the distinction between lexicology and lexicography). Terminography in this case means the art of creating "terminologies" and "special dictionaries". Thus, according to the authors' point of view, terminology includes a theoretical component and the result of the combination of terminological theory and practice (specialized dictionaries). Terminology is an independent field and has its own theory and methodology for the special vocabulary of the language.

A detailed review of the works of Anglo-American researchers devoted to terms and terminology is covered in the study of V.V. Kasyanov. According to the author, the statements about the uniformity of the points of view in the works of these scientists - explaining; A deeper study and analysis of the theoretical and practical materials of Anglo-American linguists reveals theoretical differences in their interpretations regarding the uniqueness of terms and their difference from the common vocabulary.

The conclusions of V.V. Kasyanov were confirmed in a recent study by a representative of Slovak linguistics: Kabre and Kageura's research on terminology has a clearly focused goal and can serve as a foundation for the methodology of this field, giving it the status of an independent science. is to determine the characteristics that serve as the basis from the theoretical point of view. Nevertheless, they both emphasize the need for future research and collaborative efforts to allow the emergence of an appropriate theoretical model. It is not easy to fulfill this task due to the lack of communication between specialists, the development of the subjects of the debate in different ways and the variable perception.

At the end of the 70s of the 20th century, V. P. Danilenko in his monograph on the terminological lexicon of the Russian language analyzes the issues of terminology, in particular, a number of scientific works of the 40s and 70s. V. P. Danilenko gives 19 definitions of the concept of "term". The Russian linguist says that "all the definitions of the term are only a small part of the definitions found in almost every study of the special lexicon" [60; -B.86].

After V.P. Danilenko, S.D. Shelov, in order to clarify the nature of the term, to compare and evaluate different definitions of the concept of "term", in his work entitled "Eshche raz ob opredelenii ponyatiya termin" (Once again about the definition of the concept of term) of this concept in the 80s of the 20th century -

cites 31 definitions taken from scientific, dictionary-reference, educational publications on linguistics and terminology published in the 1990s and the beginning of the 21st century.

Conclusions and suggestions. It is necessary to create more scientific research and new terms for the terminology related to the field of tourism. Semantic descriptions of the term according to the scientific works of our scientists: its methodological neutrality, striving for nominativeness, commonalities and differences in the terminology of different languages are of great importance in research.

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*Ермошина А.Р.
студент
Финансовый университет
при Правительстве Российской Федерации
Научный руководитель: Легошич Н.В., к.э.н.
Финансовый университет
при Правительстве Российской Федерации*

ИНТЕГРАЦИЯ ИНТЕРНЕТ-ТЕХНОЛОГИЙ В МАРКЕТИНГОВУЮ СТРАТЕГИЮ ОБРАЗОВАТЕЛЬНОЙ ОРГАНИЗАЦИИ

Аннотация. В современном мире Интернет играет ключевую роль во всех сферах деятельности, включая образование. В условиях высокой конкуренции на рынке образовательных услуг необходимо прибегать к инновационным маркетинговым инструментам. В работе рассмотрены такие интернет-технологии маркетинга как: поисковая оптимизация веб-сайтов, email-рассылки, контент-маркетинг, использование видеороликов на видео-хостингах, использование рекламы у лидеров мнений. В статье приведен анализ возможных результатов использования данных инструментов и сформулированы рекомендации по их применению при выстраивании маркетинговой стратегии образовательной организации.

Ключевые слова: образовательное учреждение, целевая аудитория, маркетинг, email-маркетинг, SEO, Интернет.

*Ermoshina A.R.
student
Financial University under the Government of the Russian Federation
Scientific adviser: Levoshich N.V., candidate of economic sciences
Financial University under the Government of the Russian Federation*

INTEGRATION OF INTERNET TECHNOLOGIES IN MARKETING STRATEGY OF EDUCATIONAL ORGANIZATION

Abstract. In the modern world, the Internet plays a key role in all spheres of activity, including education. In conditions of high competition in the market of educational services it is necessary to resort to innovative marketing tools. The paper considers such Internet marketing technologies as: search engine optimization of websites, email newsletters, content marketing, use of video clips on video-hosting sites, use of advertising from opinion leaders. The article presents the analysis of possible results of using these tools and formulates recommendations for their use in building a marketing strategy of an educational organization.

Key words: educational institution, target audience, marketing, email marketing, SEO, Internet.

В современном мире Интернет играет ключевую роль во всех сферах деятельности, включая образование. В условиях высокой конкуренции на рынке образовательных услуг, для привлечения студентов и удержания их внимания, образовательным организациям (далее - ОО) становится необходимым прибегать к инновационным маркетинговым инструментам. Традиционные дни открытых дверей и распространение печатной рекламы все еще работают, но уже не так эффективно. Чтобы быть заметным в поле зрения потенциальных потребителей, образовательные учреждения разного уровня прибегают к использованию интернет-маркетинга.

Кроме выполнения роли оптимизации продвижения, онлайн-технологии в маркетинговой среде образования также являются мощным инструментом влияния маркетинга на все процессы функционирования организации. В первую очередь, интернет-среда позволяет ОО расширить свой охват и достичь глобальной аудитории студентов. Вне зависимости от географического положения учебного заведения или самого обучающегося, полная автоматизация процесса привлечения и сопровождения студента по пути к покупке продукта позволит сделать этот путь максимально прозрачным. Если какой-то элемент этого процесса работает неправильно, это можно будет отследить и проработать. Таким образом, ОО может «дотянуться» до любого потенциального потребителя, если точно знает, что этот потребитель является частью целевой аудитории (далее - ЦА).

С развитием интернета и технологий дистанционного обучения, учебные программы становятся доступными для студентов из разных стран и континентов, что дает учебным заведениям возможность расширять географию своей аудитории и повышать международную видимость. Онлайн-формат обучения уже не является чем-то непривычным для пользователей, а в сознании потенциальных потребителей закрепляется образ доступности и качества. Путем использования различных онлайн-платформ ОО могут активно взаимодействовать со своей аудиторией, не теряя связь с ними ни на одном этапе получения услуги, а при возникновении неполадки или жалобы, незамедлительно реагировать, чтобы сохранить репутацию.

Можно сделать вывод, что онлайн-пространство сопровождает обучающегося на всем пути, что позволяет оптимизировать многие процессы внутри образовательного учреждения, а маркетологам лучше узнать свою ЦА. Однако, многие нововведения еще впереди, и в настоящее время нельзя говорить о полной автоматизации образовательного процесса. Но все же онлайн-технологии заняли твердое место в области продвижения образовательных услуг. Для того, чтобы сделать этот процесс максимально экономически эффективным, маркетинговые отделы различных ОО используют инструменты онлайн-маркетинга.

У абсолютного большинства образовательных учреждений в России есть свой веб-сайт, однако же не все используют поисковую оптимизацию (далее – SEO), которая непосредственно влияет на эффективность сайта, как инструмента продвижения. SEO помогает учебным заведениям увеличить свою видимость в поисковых системах и привлечь больше потенциальных потребителей, которые входят в его целевой сегмент. Например, университет может оптимизировать свой веб-сайт, чтобы он лучше соответствовал запросам студентов, и в результате выходил на более высокие позиции в поисковой выдаче. Если студент ищет программы бакалавриата в области информационных технологий, университет, который активно использует SEO, будет выше в результатах поиска и, вероятно, получит больше кликов.

Помимо SEO, маркетинговые отделы ОО активно пользуются принципом персонализация для привлечения ЦА. Учебное заведение может запускать сегментированные кампании по электронной почте, где каждая группа студентов получает информацию, соответствующую их интересам и потребностям. Если студенты, заинтересованные в искусстве, получают информацию о специализированных курсах, они будут более склонны к регистрации. Технологии сбора данных о пользователях позволяют собрать необходимую информацию для того, чтобы создать персонализированную рекламную кампанию.

Такие индивидуально адресованные предложения могут достигать пользователя путем email-рассылок, которые тоже прочно закрепились в сознании маркетологов. Email-маркетинг является одним из самых эффективных инструментов интернет-маркетинга, так как имеет самые высокие показатели окупаемости и приводит самых целевых пользователей. Однако, успешность персонализированной рассылки сильно зависит от содержания продающего текста внутри письма, использования правильных иллюстраций и того, какой аудитории проводится рассылка. Некоторые сегменты целевой аудитории ОО могут вовсе не пользоваться электронной почтой на ежедневной основе, поэтому присылая им сообщения с акционным предложением, маркетологи не получают ожидаемых результатов. Такие частные аспекты психологического портрета ЦА должны рассматриваться задолго до того, как будет определен список инструментов, используемых для маркетинговых кампаний, чтобы деньги образовательного учреждения не были потрачены зря.

Достаточно безопасным инструментом интернет-маркетинга является контент-маркетинг – создание и распространение полезной информации для привлечения целевой аудитории. В качестве материалов с полезной информацией могут выступать собственный блог ОО (часто такие бывают на веб-сайтах), статьи на отдельных ресурсах, посты в соцсетях, подкасты и видео. Этот инструмент редко конвертируется в продажи напрямую. Он больше работает на узнаваемость бренда, формирует доверие аудитории,

доказывает экспертность, поэтому и является сравнительно безопасным среди других инструментов. Благодаря тому, что эти материалы будут выполнять не только задачу продвижения образовательного продукта, но и выступать в качестве PR- и в какой-то степени образовательного инструмента, не получится недооценить его полезность. Если что-то пойдет не так, и статья на онлайн-портале не достигнет своего целевого пользователя, она может быть использована в качестве образовательного ресурса для кого-то другого, а найти такую статью можно будет через поисковые запросы.

Видеореклама также играет значимую роль в маркетинге образования. Маркетинговая и PR-службы университета могут создать короткие видеоролики, в котором рассказываются интересные факты об образовательном учреждении, транслируются интервью с преподавателями и студентами, а также проводятся обзоры образовательных программ. Такие видеоролики могут быть опубликованы на популярных видео-хостингах, таких как YouTube и TikTok, и привлечь внимание потенциальных обучающихся, увеличивая интерес к учебному заведению.

Текстовые блоги также по-прежнему являются важным ресурсом для учащихся и их родителей, которым нужна глубокая информация, которую невозможно эффективно передать короткими видеороликами. Создание ориентированного на ЦА контента способствует увеличению вовлеченности и создает у потенциального клиента чувство сопричастности, что в итоге помогает достигать роста лояльности потенциальных и действительных потребителей.

Наличие официальных аккаунтов в соцсетях стало привычным для многих ОО, так как они являются отличной платформой для формирования имиджа. Работа с заполнением аккаунта фото-, видео- и текстовым контентом является работой PR-отделов, и главной их задачей является сделать аккаунт ОО привлекательным и интересным для целевой аудитории. С целью эффективного использования социальных сетей, как инструмента продаж, необходимо найти пути конвертации подписчиков в клиентов, что и является задачей маркетологов. Когда человек, будь то потенциальный студент или его родитель, ежедневно наблюдает за страницей образовательного учреждения, у него формируется эмоциональная связь, и в момент, когда этому человеку предстоит совершить выбор, он будет больше склонен получить образовательную услугу именно у привычной ему организации.

Продвижение через социальные сети затрагивает не только собственные аккаунты ОО, но и использование рекламы у лидеров мнений. Инфлюенсеры становятся все более важными компонентами в маркетинговых стратегиях учебных заведений. Сегодняшняя аудитория социальных сетей ищет подлинный контент от реальных людей, и локальные лидеры мнений предоставляют именно это. Однако

управляющий состав и маркетинговый отдел каждого учебного заведения должны внимательно относиться к выбору авторов мнений, которые будут главными адвокатами его бренда. Необходимо тщательно изучить востребованность тех или иных инфлюенсеров среди потенциальных потребителей, их репутацию и релевантность содержания их блога к рекламируемой теме.

Одним из ключевых преимуществ использования онлайн-платформ для целевой рекламы, как было упомянуто ранее, является возможность точечной настройки рекламных кампаний. ОО могут использовать различные инструменты таргетированной рекламы, чтобы определить конкретные характеристики своей целевой аудитории и предоставить им соответствующую информацию о своих образовательных предложениях. Благодаря возможности анализа результатов рекламных кампаний в реальном времени маркетологи могут постоянно оптимизировать свои маркетинговые усилия и увеличивать эффективность своих кампаний, что позволяет им привлекать более целевых пользователей и продвигать среди них свои образовательные программы и услуги максимально эффективно.

Онлайн-маркетинг имеет собственную культуру и не терпит халатности. Из-за высокой стоимости качественных рекламных инструментов маркетинговым отделам не стоит полагаться только на популярность того или иного ресурса. Выбор подходящих инструментов интернет-маркетинга зависит от многих факторов: возраст и образ жизни ЦА, их привычки и интересы, механизмы взаимодействия с ЦА и, конечно же, маркетинговый бюджет. Только анализируя все эти аспекты в совокупности можно построить стабильно и эффективно работающую систему маркетинговых инструментов.

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*Кагаев А.Д.
студент магистратуры
Научный руководитель: Попова Л.В., д.э.н.
профессор
Волгоградский государственный аграрный университет
Россия, г.Волгоград*

УПРАВЛЕНИЕ ЗАПАСАМИ В СОВРЕМЕННЫХ ОРГАНИЗАЦИЯХ

Аннотация. В данной статье поднимается ключевой вопрос актуальности управления запасами в современных организациях. Основное внимание уделяется изучению теоретических принципов, лежащих в основе управления запасами, а также анализу последних тенденций в сфере оптимизации этого процесса в бизнес-структурах.

Ключевые слова: управление запасами организации, модель управления, метод Уильсона, метод ABC, метод XYZ, нейросетевое моделирование.

*Kagaev A.D.
graduate student
Scientific supervisor: Popova L.V., doctor of economics
professor
Volgograd State Agrarian University
Russia, Volgograd*

INVENTORY MANAGEMENT IN MODERN ORGANIZATIONS

Annotation. This article raises the key issue of the relevance of inventory management in modern organizations. The main focus is on studying the theoretical principles underlying inventory management, as well as analyzing the latest trends in optimizing this process in business structures.

Keywords: organization's inventory management, management model, Wilson's method, ABC method, XYZ method, neural network modeling.

На данный момент, для успешного развития любой современной организации, необходимо грамотно и эффективно управлять собственными запасами.

Организациям необходимо иметь на складах определённое количество сырья и материалов, так как именно благодаря им обеспечивается постоянно и непрерывное производство продукции.

Согласно Федеральному стандарту бухгалтерского учета «Запасы» ФСБУ 5/2019 от 15.11.2019 запасы – это активы, потребляемые или

продаваемые в рамках обычного операционного цикла организации, либо используемые в течение периода не более 12 месяцев [1].

Управление запасами необходимо с целью поддержания их необходимого баланса и исключения появления дефицита или профицита материалов на складах. На формирование запасов могут влиять различные факторы, связанные с сезонностью, изменениями объема производства, увеличение или уменьшение цен или спроса и многие другие [2].

В современной практике существует несколько концепций управления запасами, такие как: консервативная, модерация и радикальная. Консервативная основана на постоянном поддержании запасов на предприятии в большом количестве. Модерация связана с постоянным анализом и выявлением лучшего соотношения запасов. Радикальная же, противоположно консервативной концепции, направлена на полную минимизацию запасов на складе.

На сегодняшний момент выделяют 2 популярные и общепринятые модели управления запасами. При первой модели, Р-модель, запасы на складе пополняются равномерно в течении определенного времени. При Q-модели, пополнение запасов на складе производится тогда, когда они израсходованы и подходят к концу. Кроме них, существуют и другие модели, такие как «фиксированная частота пополнения запасов» и «минимально-максимальная». Последняя работает с двумя уровнями запасов и активируется, когда уровень падает ниже минимального, а не по истечении определенного времени [2].

В области управления запасами существует несколько основополагающих методов, каждый из которых имеет свои уникальные характеристики и применяется в зависимости от специфических потребностей и стратегии компании. Рассмотрим наиболее распространенные из них:

Метод Уильсона: Этот метод ориентирован на оптимизацию затрат, связанных с заказом и хранением запасов. Он помогает определить идеальное количество заказа, уменьшая общие затраты на запасы.

Метод ABC: В зависимости от влияния на общую стоимость, разделят запасы на три категории. Данный метод основывается на принципе распределения Парето.

Категория А включает дорогие товары с длительным сроком службы, составляющие большую часть затрат, но меньшую часть объема запасов.

Категория В включает товары средней стоимости и значимости.

Категория С состоит из недорогих товаров, которые составляют большую часть объема, но меньшую часть стоимости запасов.

Метод XYZ-анализа: Этот метод фокусируется на волатильности спроса и точности прогнозирования для разных товаров, классифицируя их на три группы:

X - товары с стабильным спросом и высокой прогнозируемостью.

Y - товары с умеренно предсказуемым спросом, возможно, с сезонными колебаниями.

Z - товары с непостоянным спросом и низкой прогнозируемостью.

Методы MRP (Material Requirements Planning) и MRP II (Manufacturing Resource Planning): Эти компьютеризированные системы управления производством помогают в планировании поставок материалов и комплектующих, а также в управлении складированием, закупками, продажами и производственными процессами.

Выбор метода управления запасами зависит от множества факторов, включая характер продукции, размеры и специфику компании, а также от целей и задач, которые она перед собой ставит.

В современном бизнесе, улучшение управления запасами тесно связано с применением компьютерных технологий и инновационных систем. Эти решения направлены на автоматизацию и упрощение процессов, что в конечном итоге способствует эффективности и снижению затрат.

Одним из ключевых классов систем для управления запасами является MRPII (Manufacturing Resource Planning). К ним относятся такие программы как Galaxy 7.1, Solar System, Concorde XAL, Platinum, Microsoft Dynamics, Scala. Эти системы обеспечивают автоматизацию управления компанией, охватывая широкий спектр функций от производства до логистики.

Помимо систем MRPII, широко используется метод Канбан, реализуемый через такие программные платформы как Kaiten, Trello, Bitrix24. Эти инструменты основаны на концепции виртуальных досок и карточек, что позволяет эффективно управлять запасами и производственными потоками.

В дополнение к этому, для управления запасами применяется система OPT (Optimized Production Technology), представляющая собой усовершенствованную версию Канбана. Она направлена на минимизацию узких мест в производственных и логистических цепочках.

В случаях, когда традиционные методы оказываются неэффективны, на помощь приходят современные технологии анализа данных и принятия решений, такие как нейросетевое моделирование [3].

Нейросети способны к самообучению и эффективно решают задачи прогнозирования, регрессии, классификации и кластеризации. Они могут адаптироваться к конкретным условиям компании, предсказывать будущие цены на акции и влиять на оптимизацию запасов [4].

Таким образом, современные системы и технологии играют ключевую роль в управлении запасами. Они позволяют организациям улучшить управленческую деятельность, оптимизировать запасы и уменьшить затраты на их хранение. Всё это ведёт к повышению эффективности производства и улучшению конечного результата деятельности компании.

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*Мазина О.Н., кандидат педагогических наук
доцент*

Легаева Е.С.

*Федеральное государственное бюджетное образовательное
учреждение высшего образования*

«Оренбургский государственный университет»

Россия, г.Оренбург

ПОДХОДЫ И СТРАТЕГИИ ВЗАИМОДЕЙСТВИЯ ОБРАЗОВАТЕЛЬНОЙ ОРГАНИЗАЦИИ И РОДИТЕЛЕЙ В ВОСПИТАНИИ ДЕТЕЙ

Аннотация. Целью статьи является разработка содержания, подходов и стратегий взаимодействия образовательной организации и родителей в воспитании детей. Выявлены и описаны “плюсы” и “минусы” каждого подхода.

Ключевые слова: образовательная организация, подход, стратегия взаимодействия.

*Mazina O.N., candidate of pedagogical sciences
associate professor*

Legueva E.S.

Federal state budget educational institution of higher education "Orenburg

State University"

Russia, Orenburg

APPROACHES AND STRATEGIES FOR INTERACTION OF EDUCATIONAL ORGANIZATIONS AND PARENTS IN THE UPBRINGING OF CHILDREN

Abstract. The purpose of the article is to develop the content, approaches and strategies of interaction between an educational organization and parents in the upbringing of children. The “pros” and “cons” of each approach are identified and described.

Keywords: educational organization, approach, interaction strategy.

Семья и образовательная организация являются двумя ведущими социальными институтами, оказывающими влияние на воспитание и социализацию ребенка. Для полноценного качественного воспитания ребенка требуется консолидация усилий обоих этих институтов, а воспитательное влияние только одного из них является недостаточным. Сотрудничество с родителями есть условие развития современной школы,

достижения образовательных целей и создания наиболее благоприятных условий для образования и воспитания обучающихся.

Сегодня взаимодействие между школой и родителями рассматривается с учетом модернизации современной образовательной системы. Взаимодействие предполагает ориентацию на родителей как на «заказчиков» образовательных услуг, и, в то же время, активных, добросовестных и ответственных потребителей, способных правильно оценить их качество и принять участие в оптимизации учебной деятельности обучающихся в соответствии с образовательными запросами и современными требованиями к самоорганизации учебного процесса. Всё это предусматривает необходимость выстраивания долгосрочных взаимовыгодных отношений с родителями на принципах и условиях социального партнёрства. Взаимодействие школы и семьи выстраивается через новые формы сотрудничества, обозначенные современной стратегией образования.

На необходимость выстраивания взаимодействия семьи и образовательной организации, в которой обучается и воспитывается ребенок, указывают научные исследования, с одной стороны, и нормативная правовая база Российской Федерации, с другой стороны.

Так, П.П. Блонский подчеркивал, что огромная роль родителей заключается в том, что они являются первыми воспитателями своих детей, и воспитание ребенка начинается именно с них [1]. А.С. Макаренко утверждал, что семью необходимо рассматривать как трудовой коллектив, который должен взаимодействовать по вопросам воспитания с учащимися и с коллективом обучающихся их учителей [2]. В.А. Сухомлинский, говоря о необходимости взаимодействия образовательных организаций с семьями воспитанников, отмечал, что без активного участия родителей в жизни школы, без постоянного духовного обогащения взрослых и детей невозможна сама семья как первичная ячейка общества, невозможна школа как важнейшее учебно-воспитательное учреждение и невозможен моральный прогресс общества в целом. Задачи воспитания, по мнению В.А. Сухомлинского, могут быть решены успешно только в том случае, если школа поддерживает связь с семьей, если между педагогами, воспитателями и родителями установились отношения доверия и сотрудничества [3].

Нормативная правовая база для организации взаимодействия образовательной организации и родителей (законных представителей) обучающихся включает официальные документы (Указы Президента Российской Федерации, Федеральные законы, распоряжения Правительства, законодательные акты и др.), в которых, с одной стороны, гарантируется обеспечение воспитания как неотъемлемой части образования, а с другой стороны, закрепляется приоритет семейного воспитания.

Так, Конституция Российской Федерации гарантирует государственную поддержку семьи, материнства, отцовства и детства, декларирует равные права и обязанности родителей по воспитанию детей (ст. 7, п. 2, ст. 38, п.п. 1, 2).

В Семейном кодексе Российской Федерации конкретизируется, что родители имеют право и обязаны воспитывать своих детей, несут ответственность за воспитание и развитие своих детей. Они обязаны заботиться о здоровье, физическом, психическом, духовном и нравственном развитии своих детей. Родители имеют преимущественное право на обучение и воспитание своих детей перед всеми другими лицами (ст. 63, п. 1).

В рамках национальной цели «Возможности для самореализации и развития талантов», определенной Президентом Российской Федерации В. В. Путиным, одним из целевых показателей является создание условий для воспитания гармонично развитой и социально ответственной личности на основе духовно-нравственных ценностей народов Российской Федерации, исторических и национально-культурных традиций [6].

Федеральный закон от 29 декабря 2012 года № 273-ФЗ «Об образовании в Российской Федерации» (в редакции Федерального закона от 14 июля 2022 года № 262-ФЗ) гласит, что [5]:

– родители (законные представители) несовершеннолетних обучающихся имеют преимущественное право на обучение и воспитание детей перед всеми другими лицами; они обязаны заложить основы физического, нравственного и интеллектуального развития личности ребенка (ст. 44, п. 1);

– органы государственной власти и органы местного самоуправления, образовательные организации оказывают помощь родителям (законным представителям) несовершеннолетних обучающихся в воспитании детей (ст. 44, п. 2);

– родители (законные представители) несовершеннолетних обучающихся имеют право знакомиться с содержанием образования, используемыми методами обучения и воспитания, образовательными технологиями, а также с оценками успеваемости своих детей (ст. 44, п. 3.4);

– родители (законные представители) несовершеннолетних обучающихся имеют право принимать участие в управлении организацией, осуществляющей образовательную деятельность, в форме, определяемой уставом этой организации (ст. 44, п. 3.7).

В «Стратегии развития воспитания в Российской Федерации на период до 2025 года» определены приоритеты государственной политики в сфере воспитания детей, одним из которых является развитие высоконравственной личности на основе признания определяющей роли семьи и соблюдения прав родителей, кооперации и сотрудничества

субъектов системы воспитания... с целью совершенствования содержания и условий воспитания подрастающего поколения России [4].

Соответственно, цель взаимодействия образовательной организации и семьи в контексте – это установление длительных, постоянных и плодотворных отношений, способствующих повышению качества и эффективности воспитания ребенка.

Анализ научно-методической литературы, с одной стороны, и практической деятельности образовательных организаций – с другой, позволяет сделать вывод о существовании на сегодняшний день трех основных стратегий взаимодействия с родителями:

1) стратегия развития открытого сообщества школы и семьи, которая предполагает организацию открытого взаимодействия, выстраивание длительных взаимоотношений, наращивание практики и опыта устойчивых педагогических традиций;

2) стратегия быстрого реагирования, которая направлена на оперативное вмешательство в жизнь ребенка и семьи, оказавшихся в социально опасном положении; характеризуется применением поддерживающих технологий, социальной направленностью деятельности специалистов образовательных организаций;

3) стратегия смешанного типа, включающая элементы первой и второй и предполагающая реализацию комплексного подхода к решению актуальных проблем развития личности учащегося.

Исходя из содержания цели взаимодействия образовательной организации и родителей, очевидно, что ей больше всего соответствует первая из перечисленных стратегий. Вне зависимости от стратегии взаимодействия можно выделить следующие основные подходы к выстраиванию взаимоотношений между образовательной организацией и родителями воспитанников.

Первый подход условно можно назвать «воспитание родителей». Данный подход достаточно глубоко проработан теоретически и имеет широкое практическое применение. Основная функциональная нагрузка по планированию, организации и реализации взаимодействия с семьей при таком подходе ложится на классных руководителей или воспитателей.

Среди плюсов данного подхода можно выделить:

- охват широкого круга воспитательных проблем;
- наличие большого количества теоретических и практических разработок в этой области;
- возможность взаимодействия с большим количеством родителей.

К числу минусов можно отнести:

- отсутствие индивидуального подхода к родителям и к семье в целом;
- одностороннюю направленность деятельности «от образовательной организации к родителям»;
- ориентацию на «среднего родителя» и «среднего ребенка»;

– постановку родителя в позицию объекта.

Второй подход можно условно назвать «социологическим». Семья подразумевается элементом социальной среды, окружающей образовательную организацию. Одним из базовых оснований данного подхода является изучение семьи ребенка сотрудниками образовательной организации и учет выявленных семейных особенностей воспитания. При дальнейшем взаимодействии с этими семьями педагоги/специалисты образовательной организации максимально используют обнаруженные положительные особенности семейного воспитания и нивелируют отрицательные. Этот подход чаще всего актуален для образовательных организаций, имеющих неблагоприятное социокультурное окружение с большим количеством неблагополучных семей и семей «группы риска». В таких условиях все усилия направляются на внутреннюю воспитательную работу в рамках образовательной организации.

Положительным моментом данного подхода является индивидуальный подход к ребенку, при котором учитываются особенности семьи и создаются оптимальные условия для воспитания ребенка в школе.

Отрицательным моментом является тот факт, что родители не всегда задействованы в процессе воспитания ребенка в образовательной организации.

Третий подход условно можно назвать «развивающим». В его основу положен постулат о наличии в семье скрытого воспитательного потенциала, который при определенных условиях может быть реализован в воспитательном процессе. Соответственно, главная задача образовательной организации заключается в создании таких условий, при которых родители могут самостоятельно и эффективно решать проблемы, и отвечать на вопросы, связанные с воспитанием ребенка в семье. Данный подход предполагает диагностику проблем и потребностей родителей в сфере воспитания, учет особенностей ребенка, индивидуальный подход в организации взаимодействия с семьей, определение «резервной области» в сфере семейного воспитания. Реализация этих задач требует комплексного использования различных форм взаимодействия, привлечения квалифицированных специалистов, обеспечение высокого уровня мотивации.

Плюсами данного подхода являются:

- активная позиция родителей при взаимодействии с образовательной организацией;
- создание условий для самовоспитания и саморазвития родителей;
- равноправные субъект-субъектные отношения между образовательной организацией и родителями;
- устойчивость полученных позитивных изменений в воспитании, обеспечиваемых воспитательной активностью образовательной организации и семьи.

Минусами данного подхода являются:

- высокая трудоемкость организации и реализации подхода;
- недостаток научно-методического обеспечения эффективного взаимодействия образовательной организации и родителей.

Все упомянутые подходы могут реализовываться в образовательной организации одновременно в отношении различных категорий родителей (при наличии достаточных ресурсов в организации).

На практике наиболее распространенным является вариант сочетания подходов «воспитание родителей» и «социологического» с преобладанием первого. Третий из вышеназванных подходов встречается редко и осуществляется по отношению к наиболее благополучным семьям, не имеющим тяжелых отклонений в системе семейного воспитания.

Таким образом, главной задачей в организации взаимодействия семьи и школы является достижение единства понимания и принятия педагогами и родителями цели и ценностей воспитания. Данное единство является обязательным условием реализации качественного и эффективного воспитания, тем фундаментом, на котором должно строиться воспитательное влияние на ребенка дома, в детском саду, в школе, в колледже и в прочих образовательных организациях.

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ИНФОРМАЦИОННЫЕ И КОММУНИКАТИВНЫЕ ТЕХНОЛОГИИ

*Raxmatullayev D.A.
TATU Qarshi filiali OAT va TX kafedrası assistent*

IOT XAVFSIZLIK CHORALARINING TAKOMILLASHTIRISH USULLARI

Annotatsiya. "Internet of Things" (IoT) texnologiyalari tez sur'atlar bilan rivojlanib bormoqda va tobora ko'proq turmushimizning barcha jabhalarida qo'llanilmoqda. Biroq, IoT qurilmalarining ko'payishi bilan bir qatorda, ularning xavfsizligi bo'yicha masalalar ham kuchaymoqda. Ushbu ilmiy ish IoT qurilmalarining xavfsizlik choralari yaxshilashga bag'ishlangan bo'lib, hujumlardan himoyalash, ma'lumotlarni himoya qilish va xavfsizlik protokollarini modernizatsiya qilishga qaratilgan strategiyalar va texnologiyalarni o'z ichiga oladi.

Kalit so'zlar. IoT (Internet of Things), Xavfsizlik Protokollari, Ma'lumotlarni himoyalash, Shifrlash algoritmlari, Autentifikatsiya usullari, Kiber tahdidlar IoT qurilmalari, Tarmoq xavfsizligi, Hujum aniqlash tizimlari (IDS), IoT standartlar.

*Raxmatullayev D.A.
assistant
OAT and TX department
TATU
Karshi branch*

METHODS OF IMPROVING IOT SECURITY MEASURES

Abstract. Internet of Things (IoT) technologies are developing rapidly and are increasingly being used in all aspects of our lives. However, along with the proliferation of IoT devices, their security concerns are also increasing. This scientific work is devoted to improving the security measures of IoT devices and includes strategies and technologies aimed at protecting against attacks, protecting data and modernizing security protocols.

Keywords. IoT (Internet of Things), Security Protocols, Data Protection, Encryption Algorithms, Authentication Methods, Cyber Threats IoT Devices, Network Security, Intrusion Detection Systems (IDS), IoT Standards.

Kirish. IoT texnologiyalari (Internet of Things) bizning kundalik hayotimizga tobora kirib bormoqda. Aqlli uyalar, salomatlikni monitor qiladigan

gadjetlar va shahar infrastrukturasini boshqarish tizimlari kabi sohalar IoT orqali sezilarli darajada rivoj topmoqda. Biroq, IoT qurilmalarining ko'payishi bilan ularning xavfsizligiga bo'lgan tahdidlar ham ortib bormoqda. Bu maqola IoT qurilmalari xavfsizligiga qarshi kurashish usullarini va bu borada sun'iy idrokdan (AI) foydalanishning yangi imkoniyatlarini o'rganadi. IoTni kiber hujumlardan himoya qilish uchun turli xavfsizlik protokollari, jumladan zarur shifrlash algoritmlarini va fiziki xavfsizlik texnologiyalarini ishlab chiqish muhim ahamiyat kasb etadi. IoT qurilmalar uchun xavfsizlik choralarini amalga oshirishda shu jumladan end-to-end shifrlash, autentifikatsiya mexanizmlari va zararli trafikni aniqlash tizimlarini qo'llash zarurligidan tashqari, bu jarayonda qurilmaning samaradorligini pasaytirmaslik ham inobatga olinadi. Xavfsizlik tahlillari va sinovlarini o'tkazish jarayonida aniqlangan kamchiliklar IoT qurilmalarining dasturiy ta'minoti yangilanishlari va qattiq disk (firmware) takomillashtirishiga olib keladi. Shu bilan birga, IoT tarmoqlarini boshqarishda blokcheyn texnologiyalaridan foydalanish, bu tarmoqlarni ta'qib qilishni qiyinlashtiradi va ularda yuz beradigan ma'lumot almashtirish jarayonini xavfsiz va shaffof qiladi. Shundan tashqari, IoTni yanada xavfsiz qilish uchun sun'iy idrok algoritmlari va mashinaviy o'rganish yondashuvlaridan foydalanish tavsiya etiladi. AI tahlil qilish algoritmlari yordamida IoT qurilmalaridan yig'ilgan katta hajmdagi ma'lumotlarni real vaqt rejimida tahlil qilish imkoniyati mavjud bo'ladi. Bu yondashuvlar xavfsizlik tizimlariga anomal oqimlar yoki noo'rin faoliyat belgilari paydo bo'lishi bilan darhol munosabat qaytarish imkonini beradi, bu esa tavakkalchilikni sezilarli darajada kamaytiradi.

Jadvalda IoT tizimlarining xavfsizligini takomillashtirish uchun qo'llanilishi mumkin bo'lgan turli xil xavfsizlik choralarini, ularning maqsadlarini, qo'llaniladigan texnologiyalarni va kutilayotgan natijalarni ta'riflaydi.

Quyidagi jadvalda IoT xavfsizlik choralari takomillashtirish usullari keltirilgan.

Xavfsizlik Choralari	Tavsif	Takomillashtirish Usullari
Autentifikatsiya va Avtorizatsiya	IoT qurilmalarini himoyalash va foydalanishni nazorat qilish	- Kuchli parollar va ko‘p faktorli autentifikatsiya (2FA) qo‘llash - Avtorizatsiya darajalarini belgilash va foydalanuvchilarni nazorat qilish
Shifrlash	Ma'lumotlarni himoya qilish uchun shifrlash vositalari	- Qurilmalarda va uzatish vaqtida ma'lumotlarni shifrlash (TLS/SSL) - Qat'iy shifrlash standartlarini joriy qilish
Tarmoq Xavfsizligi	Tarmoqqa hujumlarning oldini olish va tarmoq xavfsizligini ta'minlash	- Xavfsizlik devorlari (firewall) va tarmoqni aniqlash tizimlari (IDS/IPS) o‘rnatish - Virtual xususiy tarmoqlar (VPN) foydalanish
Firmware va Dasturiy Ta'minot Yangilanishlari	Qurilmalarni yangilab, himoyasini kuchaytirish	- Avtomatik yangilanish tizimlarini joriy qilish - Xavfsizlik yamog‘larini muntazam ravishda o‘rnatish
Qurilma boshqaruvi va monitoring	Qurilmalarning xavfsizlik holatini doimiy kuzatish	- IoT qurilmalarini boshqarish platformalarini ishlatish - Real vaqtda monitoring va ogohlantirish tizimlarini o‘rnatish
Ma'lumotlar xavfsizligi va Maxfiylik	Ma'lumotlarning xavfsizligini ta'minlash va maxfiylikni saqlash	- Ma'lumotlarni anonimlashtirish va pseudonimizatsiya qilish - Ma'lumotlar oqimining xavfsizligini ta'minlash
Fizik xavfsizlik	IoT qurilmalarining fizik xavfsizligini ta'minlash	- Qurilmalarni fizik ravishda himoya qilish, masalan, qulflangan kabinetlar va qulf qo‘llash - Muhit xavfsizligini ta'minlash (masalan, video nazorat tizimlari)
Qo‘shimcha xavfsizlik mexanizmlari	Qo‘shimcha xavfsizlik choralari	- Xavfsizlik monitoringi xizmatlarini jalb qilish - Penetratsion testlar va xavfsizlik auditi o‘tkazish

Ushbu usullar IoT qurilmalar va tarmoqlarni himoya qilishda samarali natijalar berishi mumkin. Har bir xavfsizlik chorasi o'ziga xos jihatlari bilan ajralib turadi va kompleks xavfsizlik yondashuvi uchun birgalikda qo'llanilishi kerak.

Iot texnologiyasini takomillashtirish usullari. IoT (Internet of Things) texnologiyalari orqali turli qurilmalar va sensorlar Internetga ulanib, yaxlit ma'lumotlar oqimini yaratish imkoniyatiga ega bo'lib, bu texnologiya turli sohalarda, jumladan aqlli uyalar, sanoat, sog'liqni saqlash va chakana savdo kabi sohalarda keng qo'llaniladi. IoT texnologiyasini takomillashtirish usullari quyidagilarni o'z ichiga oladi.

Energiya Samadorligi. IoT qurilmalar ko'pincha cheklangan energiya resurslariga ega. Energiya tejash sxemalari va texnikalarini, masalan, "Energy Harvesting" yoki bateriya hayoti uzaytirish texnologiyalarini takomillashtirish muhimdir.

Aloqa Protokollari. Bluetooth Low Energy (BLE), ZigBee, LoRa va 5G kabi aloqa protokollarini rivojlantirish orqali IoT qurilmalarining uzatilish masofasini oshirish va energiya samaradorligi yaxshilanadi.

Kiberxavfsizlik. IoT qurilmalar sonining ko'payishi kiber tahdidlarni ham oshiradi. Shifrlash, yangi autentifikatsiya mexanizmlari, va qurilmalar o'rtasida xavfsizlik dasturlarini yaxshilash zarur.

Ma'lumotlarni Qayta Ishlash. IoT yaratgan katta ma'lumot oqimini qayta ishlash qobiliyatini oshirish uchun edge computing va fog computing kabi yangi texnologiyalarni joriy qilish.

Sensor Texnologiyalari. Aniqlikni va mustahkamlikni yaxshilash uchun yangi yoki yaxshi sensorlar ishlab chiqishga e'tibor berish talab etiladi.

O'z-o'zini Tuzatuvchi Tarmoqlar. IoT tarmoqlari o'zini avtomatik tarzda tuzatishi va optimallashtirishi mumkin bo'lgan texnologiyalarni ishlab chiqish.

Foydalanuvchi Interfeyslari. Foydalanuvchi tajribasini yaxshilash va aqlli qurilmalar orqali oson navigatsiya qilish uchun intuitiv interfeyslar yaratish.

XULOSA. IoT qurilmalar xavfsizligini ta'minlashda yangi texnologiyalar va yondashuvlar aniqlanmoqda. Ushbu ilmiy ishda tadqiq etilgan texnologiyalar va strategiyalar IoT qurilmalari va tarmoqlar uchun yangi avlod xavfsizlik echimlarini yaratishga yordam beradi. Bu usullar IoT ekotizimini yanada ishonchli va yaxlit qilishga xizmat qiladi va keng qo'llaniladigan IoT texnologiyalari va qurilmalaridan foydalanish xavfsizligini oshirishda muhim ahamiyatga ega bo'ladi.

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*Аверьянова А.Н.
старший преподаватель
кафедра ИСТ
Салихов Р.Р.
студент
Субханкулов А.М.
студент*

**ФГБОУ ВО «Поволжский государственный университет
телекоммуникаций и информатики»
Российская Федерация, г. Самара**

ТЕХНОЛОГИЯ БЛОКЧЕЙН КАК ИНСТРУМЕНТ ОБЕСПЕЧЕНИЯ БЕЗОПАСНОСТИ И НАДЕЖНОСТИ ЭЛЕКТРОННОГО ДОКУМЕНТООБОРОТА

Аннотация. Данная статья исследует роль технологии блокчейн в обеспечении безопасности и надежности электронного документооборота в современных организациях. Рассматриваются основные преимущества использования блокчейна в сфере документооборота. Также обсуждаются вызовы и препятствия, с которыми сталкиваются организации при внедрении этой технологии.

Ключевые слова: блокчейн, документооборот, безопасность, надежность, электронные документы

*Averyanova A.N.
senior lecturer
IST department
Salikhov R.R.
student
Subkhankulov A.M.
student*

*Povolzhskiy State University of Telecommunications and Informatics
Russian Federation, Samara*

BLOCKCHAIN TECHNOLOGY AS A TOOL FOR ENSURING THE SECURITY AND RELIABILITY OF ELECTRONIC DOCUMENT MANAGEMENT

Abstract. This article examines the role of blockchain technology in ensuring the security and reliability of electronic document management in modern organizations. It considers the main advantages of using blockchain in

the field of document management and discusses the challenges and obstacles organizations face when implementing this technology.

Keywords: blockchain, document management, security, reliability, electronic documents

Несмотря на почти десятилетнюю историю своего существования, использование технологии блокчейн остается относительно невысоким. Ее концепция основана на распределенной базе данных, представленной в виде цепи блоков, где каждый блок содержит информацию о предыдущих блоках, включая их местоположение. Каждый блок в распределенной сети защищен шифрованием, что обеспечивает сохранность информации и быструю синхронизацию данных между всеми пользователями при необходимости. Отсутствие централизованного сервера позволяет владельцу ключа получать доступ к любому блоку из любой точки мира с помощью любого устройства. Эта особенность является ключевым отличием технологии блокчейн от облачного хранения в классическом понимании [1].

На данный момент основное применение этой технологии связано с финансовыми транзакциями через компьютерные сети, в особенности с криптовалютами. Однако помимо финансовых операций, существуют и другие области применения блокчейна, такие как регистрация сделок, заключение контрактов и подтверждение личности пользователя на этапе идентификации [2].

Современные организации сталкиваются с рядом проблем в сфере документооборота, включая угрозы безопасности, возможность фальсификации документов и сложности в аутентификации и авторизации пользователей. В такой контекст, блокчейн-технология приобретает все большую популярность как инструмент для решения данных проблем.

Технология обладает рядом характеристик, которые обеспечивают ее надежность и вызывают доверие к ней. Преимущества блокчейна сводятся к следующему:

1. Надежность и целостность данных

Одним из ключевых преимуществ блокчейна является его способность обеспечить надежность и целостность данных. В блокчейне информация хранится в виде блоков, каждый из которых содержит уникальный хеш предыдущего блока и данных транзакции. Это делает невозможным изменение или удаление уже существующих записей без изменения хеша всей цепочки блоков, что обеспечивает надежность и неподдельность документов. Таким образом, один и тот же документ — всегда один и тот же хеш (при использовании одинакового алгоритма). Если в исходном документе изменился хоть один символ — хеш изменится до неузнаваемости.

2. Прозрачность и отслеживаемость

Блокчейн обеспечивает прозрачность и отслеживаемость всех транзакций и изменений, совершенных с документами. Каждая транзакция записывается в распределенный реестр и доступна для просмотра всем участникам сети. Это позволяет организациям точно определить, кто и когда вносил изменения в документы, и установить их подлинность.

3. Улучшенная безопасность

Благодаря использованию криптографии и консенсусных механизмов, блокчейн обеспечивает высокий уровень безопасности данных. Для взлома системы требуется атака нескольких узлов сети, что делает такие попытки экстремально сложными и дорогостоящими. Это делает блокчейн особенно привлекательным для хранения чувствительной информации.

4. Упрощение процессов аутентификации и авторизации

Благодаря использованию умных контрактов, блокчейн может автоматизировать процессы аутентификации и авторизации пользователей. Умные контракты представляют собой программные коды, которые выполняют определенные действия при выполнении заданных условий. Это сокращает время на выполнение этих операций и снижает риски человеческого фактора.

При внедрении блокчейн-технологии в документооборот возникают несколько значительных вызовов, которые могут затруднить или задержать процесс интеграции.

Первым из них являются технические сложности. Внедрение блокчейна требует специализированных знаний и навыков в области криптографии, распределенных систем и смарт-контрактов. Недостаток квалифицированных специалистов в этой области может замедлить процесс внедрения и увеличить его стоимость, поскольку требуется обучение персонала или привлечение внешних экспертов.

Вторым вызовом являются юридические аспекты. Существующее законодательство может не полностью соответствовать использованию блокчейна, особенно в отношении защиты персональных данных. Организации должны тщательно изучить законодательные нормы и обеспечить соответствие своих действий требованиям закона, что может потребовать дополнительных юридических консультаций и адаптации процессов работы [3].

Третий вызов связан с масштабируемостью и производительностью. Некоторые блокчейн-платформы могут столкнуться с проблемами масштабируемости и производительности при обработке больших объемов данных. Разработка эффективных решений для увеличения производительности и масштабируемости является одним из главных вызовов при внедрении блокчейна, так как обеспечение оперативной работы системы при обработке большого количества документов является ключевым для успешного применения технологии в документообороте.

Блокчейн-технология представляет собой мощный инструмент для обеспечения безопасности и надежности документооборота в организациях. Ее преимущества включают высокую степень защиты данных, прозрачность, отслеживаемость и улучшенную безопасность. Однако для успешного внедрения блокчейна необходимо учитывать технические, юридические и организационные аспекты, а также разрабатывать эффективные стратегии реализации и масштабирования этой технологии.

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Бекматов А.К.
ассистент
кафедра «Оптические системы связи и сетевая безопасность»
ТУИТ им. Мухаммада ал-Хоразми
Каршинский филиал

ГЛУБОКОЕ ОБУЧЕНИЕ ДЛЯ ПОВЫШЕНИЯ ЭФФЕКТИВНОСТИ ОБНАРУЖЕНИЯ ВТОРЖЕНИЙ В СЕТЕВЫХ СИСТЕМАХ

Аннотация. Статья изучает глубокое обучение в улучшении систем обнаружения сетевых вторжений, рассматриваются подходы в идентификации скрытых угроз и отклике на кибератаки.

Ключевые слова: Кибербезопасность, Искусственный интеллект (ИИ), Глубокое обучение (DL), Нейросети, Обнаружение вторжений, IDS.

Bekmatov A.K.
assistant
Department "Optical Communication Systems and Network Security" of
TUIT named after Muhammad al-Khwarizmi
Karshi Branch

DEEP LEARNING FOR ENHANCING THE EFFECTIVENESS OF INTRUSION DETECTION IN NETWORK SYSTEMS

Abstract. The article explores deep learning in improving network intrusion detection systems, considering approaches in identifying hidden threats and responding to cyber-attacks.

Keywords: Cybersecurity, Artificial Intelligence (AI), Deep Learning (DL), Neural Networks, Intrusion Detection, IDS.

Введение. В эпоху усиления цифровизации мира, вопросы кибербезопасности приобретают особую актуальность. От постоянно растущего количества устройств, подключенных к Интернету вещей (IoT), до распределенных сетевых систем больших предприятий, от уязвимости данных до роста сложности кибератак - все это ставит безопасность сетей на передний край борьбы с киберпреступностью. В таком контексте системы обнаружения вторжений (IDS) выступают как первая линия защиты, предназначенная для идентификации, анализа и противодействия киберугрозам.

Огромные объемы данных, генерируемые современными сетями, требуют нового уровня интеллектуального анализа, который могут предложить методы глубокого обучения. Эти методы позволяют создавать модели, способные обучаться на основе опыта, распознавать сложные

паттерны и прогнозировать потенциальные угрозы с быстроедействием и точностью, недостижимыми для традиционных подходов.

Однако внедрение глубокого обучения в IDS сопряжено с рядом сложностей, начиная от сбора и предварительной обработки качественных обучающих наборов данных до интерпретации результатов работы сложных нейронных сетей. В этой статье мы рассмотрим, как глубокое обучение трансформирует пейзаж IDS, обеспечивая более высокую точность и надежность в обнаружении вторжений, при этом подчеркивая необходимость комплексного подхода к разработке и поддержке этих систем для поддержания безопасности в динамичной сетевой среде.

Основная часть. Исследования в области IDS показывают, что глубокое обучение значительно улучшает обнаружение несанкционированных вторжений. Разнообразие исследований фокусируется на применении сверточных нейронных сетей (CNN), рекуррентных нейронных сетей (RNN) и автоэнкодеров для выявления атак. Академические работы поднимают вопросы обучения сетей на полноценных и актуальных наборах данных, стратегиях обнаружения ранее неизвестных атак и механизмах минимизации ложных срабатываний.

N. Shone, T.N. Ngoc, V.D. Phai и др. разработали технику глубокого обучения для систем обнаружения вторжений, представив несимметричный глубокий автоэнкодер для неуправляемого изучения функций, достигая высокой точности обнаружения.

A. Javaid, Q. Niyaz, W. Sun, M. Alam предложили подход на основе глубокого обучения для разработки систем IDS, используя самообученное обучение на наборе данных NSL-KDD, являющемся эталоном для систем обнаружения сетевых вторжений.

L. Ashiku, C. Dagli рассмотрели системы обнаружения сетевых вторжений с использованием последних симулированных сетевых нагрузок и предложили глубокую архитектуру классификации с полудинамической настройкой.

Z. Ahmad, A. Shahid Khan, C. Wai Shiang и др. исследовали, как глубокое обучение и машинное обучение могут комбинироваться для обнаружения сетевых вторжений, обеспечивая улучшенную точность определения аномалий в сети.

Теоретические положения утверждают важность обучения сетей с учетом специфики сетевого трафика и необходимость интерпретируемости моделей, чтобы обеспечить возможность анализа и корректировки принимаемых системой решений.

Методология, используемая для исследования и анализа данных. Методология исследования базируется на применении техник глубокого обучения для расширения возможностей систем обнаружения вторжений. На первом этапе собираются и агрегируются большие наборы сетевых данных, включая нормальный трафик и разнообразные виды атак, для

обучения и тестирования моделей. Эти данные могут быть получены из публично доступных наборов, таких как NSL-KDD, или скомпилированы посредством внедрения в экспериментальные сетевые среды.

Для подготовки данных применяются методы очистки, нормализации и стандартизации. Затем определяются характеристики и параметры входных данных, которые важны для обучения нейросетевых моделей. В качестве архитектур глубокого обучения для IDS широко используются сверточные нейронные сети (CNN), рекуррентные нейронные сети (RNN), подкрепленные нейронные сети (Reinforcement Neural Networks) и другие, в зависимости от специфики задачи.

На этапе обучения модель настраивается для распознавания закономерностей атак и нормального трафика. Для увеличения точности применяются методы перекрестной проверки и тонкой настройки гиперпараметров. После тренировки модели проводится их оценка с использованием отложенных тестовых наборов данных для измерения реальной производительности.

Анализ данных включает в себя изучение метрик, таких как точность, полнота, F1-мера и матрица ошибок. Также акцент делается на сравнении обнаруженных атак с известными сценариями и на способности модели адаптироваться к новым и неизвестным угрозам.

Заключительный этап методологии включает интерпретацию и визуализацию результатов, которые помогут специалистам в сфере сетевой безопасности более быстро определить источник и природу угрозы, а также разработать соответствующую стратегию реагирования.

Описание и сравнение моделей глубокого обучения применимых в IDS. В контексте систем обнаружения вторжений (IDS) модели глубокого обучения играют ключевую роль в точном и эффективном распознавании атак. Представим обзор наиболее популярных архитектур нейросетей и сравнение их применимости и эффективности в условиях IDS.

Сверточные нейронные сети (CNN) хорошо подходят для анализа визуальных образов данных и часто используются для обработки изображений. В сфере IDS они применимы для анализа сетевых потоков, преобразуя полученные данные в изображения или использования CNN для автоматического извлечения признаков из сырых сетевых данных.

Рекуррентные нейронные сети (RNN) и их вариации, такие как LSTM (Long Short-Term Memory) и GRU (Gated Recurrent Unit), эффективно работают с временными рядами и последовательными данными, что делает их идеальными для анализа сетевого трафика, который часто имеет временную природу.

Автоэнкодеры используются в IDS для выявления аномалий, сжимая входные данные и затем восстанавливая их, что позволяет выделить несоответствия между нормальным и аномальным трафиком.

Кроме того, рассматриваются генеративно-сопоставительные сети (GAN), которые могут генерировать синтетические обучающие примеры, помогающие в увеличении количества данных для тренировки в случаях, когда реальные данные ограничены.

Сравнительный анализ моделей, представленная в таблице 1, демонстрирует, что нет одной универсальной модели, и выбор подходящей архитектуры зависит от специфик атак, типовых шаблонов в сетевом трафике и доступности обучающих данных. Так, свойства LSTM могут быть более применимы к детекции сложных сетевых атак, которые происходят на протяжении длительного времени, в то время как CNN может быть более подходящей для быстрого анализа визуализированных данных сетевого трафика.

Важно подчеркнуть, что успех применения моделей глубокого обучения в IDS значительно зависит от качества и разнообразия использованных для обучения данных, а также от тонкой настройки гиперпараметров архитектуры, адаптированные под конкретные цели и условия эксплуатации IDS.

Ключевой проблемой при применении глубокого обучения в IDS является баланс между обнаружением и ложноположительными срабатываниями. Эффективность любой модели IDS обычно оценивается через такие метрики, как точность, отзыв и F1-score.

В заключении раздела изложены результаты сравнения моделей, которые указывают на то, что нет универсального решения для IDS; выбор подходящей модели глубокого обучения зависит от конкретных требований системы и специфики сетевой среды.

Сравнительный анализ моделей глубокого обучения применимых в IDS

Таблица 1.

Модель	Характеристики	Преимущества	Недостатки	Применимость в IDS
Свёрточные нейронные сети (CNN)	Эффективное распознавание структурированных данных.	Высокая точность, автоматическое выявление признаков.	Требуют большого количества данных и вычислительных ресурсов.	Подходят для анализа визуальных данных и временных рядов трафика.
Рекуррентные нейронные сети (RNN)	Обработка последовательных данных с временем.	Хорошо подходят для временных зависимостей в данных.	Могут страдать от проблем с переобучением и затянутыми циклами обучения.	Эффективны в обнаружении аномалий в трафике и поведении пользователей.
Глубокие нейронные сети (DNN)	Глубокое и многослойное обучение для выявления	Могут выявлять неочевидные шаблоны атак.	Требуют значительных объемов обучающих	Используются для решения различных комплексных

Модель	Характеристики	Преимущества	Недостатки	Применимость в IDS
	сложных признаков.		данных, риск переобучения.	задач в области безопасности.
Автоэнкодеры	Не требуют маркированных данных, обучаются на нормальных шаблонах поведения.	Низкий уровень ложноположительных срабатываний.	Могут не обнаруживать новые, неизвестные типы атак.	Хороши для обнаружения сетевых аномалий.
Генеративно-состязательные сети (GAN)	Могут генерировать новые данные для улучшения обучения моделей.	Создают существенное улучшение модели за счет новых данных.	Сложны в настройке, высокий риск нестабильного обучения.	Применяются для генерации дополнительного обучающего материала.

Анализ эффективности подходов на основе глубокого обучения.

Анализ результатов применения моделей глубокого обучения в системах IDS выявил позитивные тенденции и одновременно определенные сложности. Эффективность изученных подходов оценивалась на основе нескольких ключевых показателей, включая точность (accuracy), полноту (recall), точность (precision) и F1-меру, которые совместно обеспечивают комплексную оценку способности моделей корректно классифицировать трафик и выявлять вторжения.

Модели глубокого обучения, особенно с использованием ансамблевых методов, могут демонстрировать более высокие уровни точности по сравнению с традиционными методами машинного обучения. Особенно это касается комплексных задач обнаружения, где необходимо распознавать новые и неизвестные типы вторжений или атак с малым количеством признаков.

Тем не менее, некоторые модели страдают от переобучения из-за сложности и многомерности сетевого трафика. Кроме того, нейронные сети, обученные на недостаточно разнообразных данных, могут не обнаруживать новые типы вторжений, что требует регулярного обновления и уточнения наборов обучающих данных.

Также следует отметить, что для более низких показателей ложнопозитивных срабатываний нужно обеспечить более тонкую настройку пороговых значений и балансировку классов данных. Проблемы вычислительной эффективности, связанные с обработкой большого количества данных в реальном времени, предстоит решить путем оптимизации моделей и инфраструктуры.

В целом, применение глубокого обучения в IDS обещает более эффективное и динамичное обнаружение вторжений с возможностью

адаптации к быстро развивающимся киберугрозам, но требует дальнейшего исследования оптимальных конфигураций и подходов к обучению для достижения наилучших результатов.

Заключение. Глубокое обучение трансформирует IDS, предлагая усовершенствованные способы для борьбы с угрозами. Однако возникающие вызовы, связанные с ресурсоемкостью и требуемыми данными, требуют дополнительных решений для оптимизации процессов обучения и повышения общей эффективности обнаружения вторжений.

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*Исламова Д.С.
старший преподаватель
«Оптические системы связи и сетевая безопасность»
ТУИТ им. Мухаммада ал-Хоразми
Каршинский филиал*

УПРАВЛЕНИЕ ИНФОРМАЦИОННЫМИ РИСКАМИ И «УРОВЕНЬ ЗРЕЛОСТИ» КОРПОРАТИВНЫХ СИСТЕМ

Аннотация. Опасности или риски рассматриваются как один из важных факторов, негативно влияющих на успех информационных систем. Неспособность должным образом организовать управление рисками может поставить под угрозу производительность и результаты каждой корпоративной информационной системы. Управление любым проектом – это комплексный процесс взаимосвязанных отношений и информационных потоков. В данной статье изучены основные инструменты выявления и исследования ряда проблем, возникающих при обеспечении информационной безопасности в корпоративных информационных системах и рисков, оказывающих негативное влияние на развитие бизнеса предприятия, а также основные сведения об их «зрелости» показаны уровни реализации проекта.

Ключевые слова: риск, корпоративные информационные системы, информационные риски, информационные сети.

*Islamova D.S.
senior lecturer
"Optical Communication Systems and Network Security"
TUIT named after Muhammad al-Khwarizmi
Karshi Branch*

INFORMATION RISK MANAGEMENT AND “MATURITY LEVEL” OF CORPORATE SYSTEMS

Abstract. Dangers or risks are considered as one of the important factors that negatively affect the success of information systems. Failure to properly manage risk can compromise the performance and results of every enterprise information system. Managing any project is a complex process of interconnected relationships and information flows. This article examines the main tools for identifying and researching a number of problems that arise when ensuring information security in corporate information systems and risks that have a negative impact on the development of the enterprise's business, as well as basic information about their “maturity” and shows the levels of project implementation.

Key words: risk, corporate information systems, information risks, information networks.

Основным фактором, определяющим отношение организации к вопросам информационной безопасности, является степень ее «зрелости». В соответствии с моделью, предложенной Carnegie Mellon University выделяется пять уровней зрелости, которым соответствует различное понимание проблем управления информационными рисками организации.

Постановка и решение задачи управления информационными рисками для организаций, находящихся на разных уровнях зрелости будут различными.

Уровень 1 - «Анархия». Признаки:

- сотрудники сами определяют, что хорошо, а что плохо;
- затраты и качество не прогнозируются;
- отсутствует контроль изменений;
- высшее руководство плохо представляет реальное положение дел.

Характеристики организации в области информационной безопасности:

- политика в области информационной безопасности не формализована и руководство этими вопросами не занимается;
- обеспечением информационной безопасности сотрудники могут заниматься по собственной инициативе, в соответствии со своим пониманием задач;

Таким образом, на первом уровне задача управления информационными рисками формально не ставится, поскольку с точки зрения руководства организации, находящейся на первом уровне зрелости, эти задачи, как правило, не актуальны. Но это не значит, что она не решается сотрудниками по собственной инициативе, и возможно эффективно, поэтому организации могут быть вполне жизнеспособными.

Уровень 2 - «Фольклор». Признаки:

- выявлена определенная повторяемость организационных процессов;
- опыт организации представлен в виде преданий корпоративной мифологии;
- знания накапливаются в виде личного опыта сотрудников и пропадают при их увольнении.

Характеристики организации в области информационной безопасности:

- на уровне руководства существует определенное понимание задач обеспечения управления информационными рисками;

– существуют стихийно сложившиеся процедуры обеспечения информационной безопасности, их полнота и эффективность не анализируется;

– процедуры не документированы и полностью зависят от личностей, вовлеченных в них сотрудников;

– руководство не ставит задач формализации процедур управления информационными рисками.

Таким образом, на втором уровне проблема управления информационными рисками решается неформально, на основе постепенно сложившейся практики. Комплекс контрмер (организационных и программно-технических) позволяет защититься от наиболее вероятных угроз, как потенциально возможных, так и имевших место ранее. Вопрос относительно эффективности защиты не ставится.

Уровень 3- «Стандарты». Признаки:

– корпоративная мифология записана на бумаге;

– процессы повторяемы и не зависят от личных качеств исполнителей;

– информация о процессах для измерения эффективности не собирается;

– наличие формализованного описания процессов не означает, что они работают;

– организация начинает адаптировать свой опыт к специфике бизнеса;

– проводится знаний и умений сотрудников с целью определения необходимого уровня компетентности;

– вырабатывается стратегия развития компетентности.

Характеристики организации в области информационной безопасности:

– руководство осознает задачи в области управления информационными рисками;

– в организации имеется документация (возможно неполная), относящейся к политике информационной безопасности;

– руководство заинтересовано в исполнении стандартов в области информационной безопасности, оформлении документации в соответствии с ними;

– осознается задача управления информационными рисками на всех стадиях жизненного цикла информационно-коммуникационной технологии.

Таким образом, на третьем уровне в организации считается целесообразным следовать в той или иной мере (возможно частично) стандартам и рекомендациям, обеспечивающим базовый уровень информационной безопасности (например, ISO/IEC 27001), вопросам документирования уделяется должное внимание. Анализ рисков

рассматривается как один из элементов технологии управления информационными рисками на всех стадиях жизненного цикла. Понятие риска включает несколько аспектов: вероятность, угроза, уязвимость, иногда стоимость.

Технология управления информационными рисками в полном варианте включает следующие элементы:

- документирование КИС с позиции информационной безопасности;
- категорирование информационных ресурсов с позиции руководства организации;
- определение возможного воздействия различного рода происшествий в области информационной безопасности на информационно-технологические - и бизнес-процессы;
- анализ информационных рисков;
- технология управления информационными рисками на всех этапах жизненного цикла КИС;
- аудит в области информационных рисков.

Уровень 4- «Измеряемый». Признаки:

- процессы измеримы и стандартизованы.

Характеристики организации в области информационной безопасности:

- имеется полный комплект документов, относящийся к обеспечению режима информационной безопасности, оформленный в соответствии с каким-либо стандартом;
- действующие инструкции соблюдаются, документы служат руководством к действию соответствующих должностных лиц;
- регулярно проводится внутренний (и возможно внешний) аудит и анализ информационных рисков;
- руководство уделяет должное внимание вопросам управления информационными рисками, в частности, имеет адекватное представление относительно существующих уровней информационных угроз и уязвимостей, потенциальном ущербе (потерях) в случае возможных инцидентов.

Таким образом, на четвертом уровне для руководства организации актуальны вопросы измерения параметров, характеризующих режим информационной безопасности. На этом уровне руководство осознанно принимает на себя ответственность за выбор определенных величин остаточных рисков (которые остаются всегда). Риски, как правило, оцениваются по нескольким критериям (не только стоимостным).

Технология управления информационными рисками остается прежней, но на этапе анализа рисков применяются количественные методы, позволяющие оценить параметры остаточных рисков, эффективность различных вариантов контрмер при управлении рисками.

Уровень 5 - «Оптимизируемый». Признаки:

– фокус сосредотачивается на повторяемости, измерении эффективности и оптимизации;

– вся информация о функционировании процессов фиксируется.

Характеристики организации в области информационной безопасности:

– руководство заинтересовано в количественной оценке существующих информационных рисков, готово нести ответственность за выбор определенных уровней допустимых и остаточных информационных рисков, ставит оптимизационные задачи построения системы управления информационными рисками.

Таким образом, на пятом уровне ставятся и решаются различные варианты оптимизационных задач в области управления информационными рисками. Примеры постановок задач:

– выбрать вариант системы управления информационными рисками, оптимизированной по критерию стоимость/эффективность при заданном уровне остаточных рисков;

– выбрать вариант системы управления информационными рисками, при котором минимизируются остаточные риски при ее фиксированной стоимости;

– выбрать архитектуру системы управления информационными рисками с минимальной стоимостью владения на протяжении жизненного цикла при определенном уровне остаточных рисков.

Результаты исследования, что в настоящее время более половины организаций относятся к первому или второму уровню зрелости. Организаций третьего уровня зрелости около 40% от общего числа и только порядка 7% от общего числа организации, относятся к четвертому и пятому уровням зрелости.

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ПРИНЯТИЯ РЕШЕНИЙ И ПРОГНОЗИРОВАНИЯ ДЕЯТЕЛЬНОСТИ ПРОМЫШЛЕННЫХ ПРЕДПРИЯТИЙ. Наука и мир, (7-1), 54-56.

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ЗДРАВООХРАНЕНИЕ В ОБЩЕСТВЕ

*Гуломов М.
студент*

АГМИ

*Эркинов Э.
студент*

АГМИ

*Болтабоев Х.
студент*

АГМИ

*Холикназарова Ш.
ассистент*

АГМИ

ВИДЫ ПРОФИЛАКТИКИ ПОСЕДЕНИЯ ВОЛОС

Аннотация. В данной статье описаны основные структуры волос, причины поседения волос, народная и косметологическая профилактика.

Ключевые слова: пигмент, кутикула, традиционная медицина, корень волоса, фолликул, терминальный волос.

*Gulomov M.
student*

ASMI

*Erkinov E.
student*

ASMI

*Boltaboev Kh.
student*

ASMI

*Kholiknazarova Sh.
assistant*

ASMI

TYPES OF PREVENTION FOR GRAYING HAIR

Abstract. This article described the basic structure of hair, the causes of graying of hair and folk and cosmetological prevention.

Key words: pigment, cuticle, traditional medicine, hair root, follicle, terminal hair.

В процентном соотношении волосы имеет следующий химический состав: 78%-кератина, 6%-липидов, 1%-пигмента и 15%-воды.

Часть волоса, расположенная над поверхностью эпидермиса, называется стержнем. Невидимая часть, расположенная в толще кожи, называется корнем (луковицей).

Строение волос: 1) Кутикула представляет собой внешнюю оболочку из ороговевших чешуек. Она служит защитой для внутренних слоев от внешних воздействий. Именно кутикула обеспечивает блеск и шелковистость волос.

2) Кортекс (корковый слой волоса) находится непосредственно под кутикулой. Он состоит из множества ороговевших веретенообразных клеток, которые можно сравнить с нитью. Эти переплетенные «ниточки» образуют микрофибриллы волоса, которые составляют крупные волокна - макрофибриллы. Чтобы миллионы микрофибрилл не распадались между собой на молекулярном уровне, существуют поперечные связи: дисульфидные, водородные и солевые.

Из-за особенностей в строении кортекса волосы могут быть прямыми и кудрявыми, которые в свою очередь наследуются генетически. В клетках этого слоя находятся пигменты, придающие волосам цвет. Кортекс также отвечает за прочность и эластичность. В данном слое происходит химический процесс выпрямления, разглаживания или окрашивания волос.

3) Медула (сердцевина) – это стержень волоса, который состоит из 2-4 слоев, не ороговевших клеток различной структуры с кератиноподобным веществом. Медула отвечает за терморегуляцию, объем и придает силу волосам. В наше время сердцевина у многих прерывистая или полностью отсутствует.

Терминальные (длинные) волосы — это волосы, которые растут на голове, на лице (борода и усы), в зоне подмышечных впадин и бикини. Щетинистые волосы — это брови, ресницы и волосы ноздрей. Терминальные и щетинистые волосы имеют одинаковое строение, отличаются только длиной, поэтому очень часто их объединяют в одну группу и называют терминально-щетинистыми волосами. Фолликул терминально-щетинистых волос находится глубоко в каждом слое, имеют широкую луковицу. Стержень терминально-щетинистых волос имеет сердцевину — слой ороговевших, плотных клеток, и называется мозговым веществом.

Причины старения волос — нарушение кровообращения фолликул с недостаточным обменом питательных веществ, нарушение в работе сальных и потовых желез, скудное или избыточное выделение гидролипидного слоя, любые гормональные изменения и неправильный уход за волосами и кожей головы.

В редких случаях при аутоиммунных заболеваниях, таких как квашиоркор, целиакия или гнездное облысение может произойти побеление

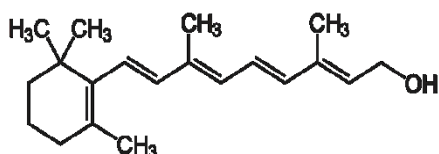
волос. В первых двух случаях потеря белка влияет на меланоциты - пигментные клетки, которые отвечают за цвет волос.

Квашиоркор - наиболее распространено в странах, где люди страдают от дефицита питания, главным образом белка, который влияет на меланоциты. Целиакия связана в основном с непереносимостью глютена.

Способы лечения Квашиоркора: 1. Инъекций 25% раствора магнезии;

2. Употребление минеральных препаратов и витаминов, в основном, серии В, содержащих селен, кальций, цинк, триптофан и т.п., то есть, вещества, способствующих выработке меланина;

3. Использование особых лечебных шампуней, в составе которых присутствуют такие элементы, как цинк, медь, железо и им подобные;

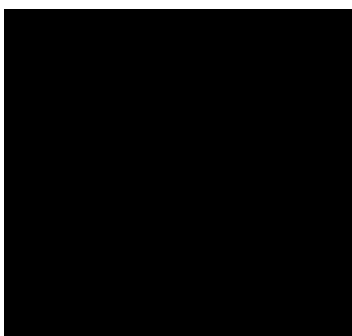


4. Ретинол (витамин А). Кожа

нуждается в этом витамине, от его концентрации зависит полноценное питание кожных покровов и обмен веществ. Он

включает процесс естественной выработки пигмента. Ретинол (истинный витамин А, (1,1,5-триметилциклогексен-5-ил-6)-(3,7-диметилнонатетраен-2,4,6,8-ол-1) (рац. формула $C_{20}H_{30}O$) — жирорастворимый витамин, антиоксидант. Витамин А представляет собой циклический непредельный спирт, состоящий из β -ононового кольца и боковой цепи из двух остатков изопрена и первичной спиртовой группы. В организме окисляется до ретиналя (витамин А-альдегид) и ретиноевой кислоты.

5. Рибофлавин (витамин В2) $C_{17}H_{20}N_4O_6$. Активизирует кровообращение в коже и тканях головы. Благодаря этому витамину волосы получают полноценное питание. Рибофлавин является биологически активным веществом, играющим важную роль в поддержании здоровья человека. Биологическая роль рибофлавина определяется вхождением его производных флавиномононуклеотида (ФМН) и флавинадениндинуклеотида (ФАД) в состав большого числа важнейших окислительно-восстановительных ферментов в качестве коферментов.



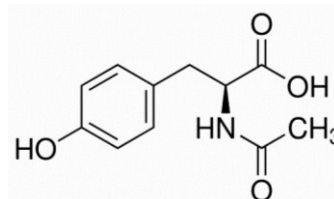
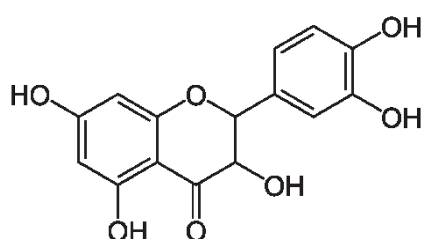
6. Сбалансированное питание, отказ от вредных привычек, регулярная физическая активность, отсутствие стресса помогут привести в норму состояние здоровья и тем самым замедлят процесс старения организма.

7. Самый простой и эффективный продукт-это соль и оливковое масло. Результат от использования достигается за счет содержания в соли особых веществ, закрепляющих и восстанавливающих волосяные луковицы (натрий, магний, кальций, калий, бром). А оливковое масло придает волосам очарование сияния и блеска и активизирует их рост.

8. Комбинация меда, соли и репейного масла – лучшее средство для восстановления и выпадения волос. Мед насыщает витаминами, соль убирает загрязнения, а масло репейника нормализует выделение кожного сала.

Приготовление: смешать столовую ложку меда и репейного масла. Добавить щепотку соли. Нанести на волосы и помассировать. Смыть через 3–5 минут.

9. Швейцарская компания Givaudan разработала революционную инновацию для решения этой проблемы — даркенил. Нанесение Даркенила непосредственно на кожу головы добавит пигментов в волосы и восстановит их цвет. Ингредиенты даркенила включают комбинацию:



Дигидрокверцетин N-ацетил-тирозин

Тирозин – это заменимая аминокислота,

то есть ваш организм может синтезировать ее

из других аминокислот, которые вы получаете с пищей. Поэтому, чтобы ваш организм получал и использовал тирозин, не обязательно принимать его. Он используется для синтеза нескольких мощных нейромедиаторов – катехоламинов, включая эпинефрин (адреналин), норэпинефрин (норадреналин) и дофамин.

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